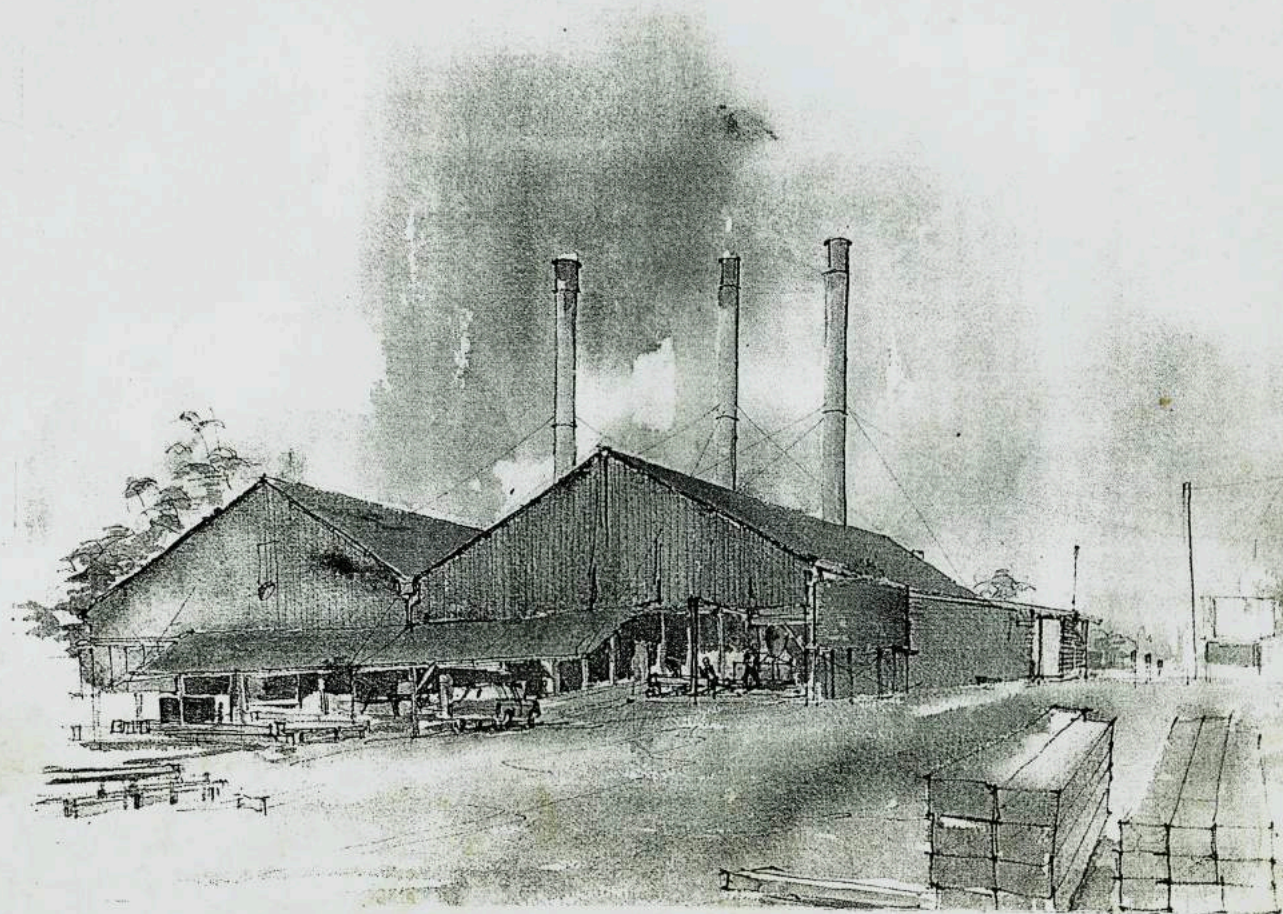


HERITAGE COUNCIL OF WESTERN AUSTRALIA

DRAFT

CONSERVATION PLAN DONNELLY RIVER MILL



MARCH 1994

G B HILL & PARTNERS PTY LTD
62 COLIN STREET
WEST PERTH WA 6005

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- | | | | |
|------------------------|---|-----------------------------------------------------------------------------------|---|
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| Mr John Scott | - | Chief Engineer of Bunnings for the construction and operating period of the mill. | |
| Mr George Adams | - | Bunnings Engineer Manjimup. | |
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| Mr Norm Haath | - | Manjimup former staff at Donnelly Mill. | |
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| Mr Brian Hearne | - | Western Australian Tourism Commission, Director Finance and Administration. | |
| Mr Bob Johnson | - | Western Australian Tourism Commission, Business Development Manager. | |
| Mr Eric Moyle | - | Water colour painting of the Mill. | |

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11. Report by the then Department of Tourism concerning the future of the mill following closure
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15. Plan of leased reserve 37707
16. Details of the Mr C R Bunning and Mr John Scott and also photographs of Mr C R Bunning at the closure of the mill, and also Mr John Scott during a site inspection in November 1993

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N K Wallis

1.0 INTRODUCTION

The Donnelly River Timber Mill was established by Bunnings Bros Ltd in 1949 to mill logs from the surrounding karri forest. The mill operated for 29 years and closed in 1978.

Although built in 1949 and reported to be at the forefront of timber mill technology at the time, the mill still represented to a large extent earlier technology being constructed mainly from local timber and powered by steam.

The mill was closed in 1978 however much of the mill fabric remains including the steam power equipment such as the boilers and engines, work areas, saws etc.

Although timber milling commenced in Western Australia soon after European settlement little evidence remains of previous mills, this is as a result of the policy of equipment being removed for use at other mills and also due to loss by fire.

Steam had always provided power for sawmill operations both at the mill and also for steam locomotives hauling logs out of the bush to the mill.

With the extension of electric power distribution and diesel power generation timber mills progressively changed to this source of power and the need to relocate steam engines to new mills on the closure of old mills has ceased.

For this reason with the closure of the Donnelly Mill it was possible to retain at the site the steam equipment, with the exception of one engine relocated to Manjimup, and much of the drive equipment.

The Donnelly River mill as it presently stands is representative of an era of timber mill design and construction technology of which little other evidence remains.

1.1 CONSULTANTS BRIEF

The brief included in Appendix 8 requires the preparation of a Conservation Plan to identify the significance of the mill, and if significant establish appropriate policies to ensure the retention of the significance and its future use and development.

In addition to the mill there remains a large number of mill houses together with the school, boarding house, social club, oval and recreation facilities. However the brief requires the Conservation Plan to cover the mill buildings, machinery and other mill features within the perimeter of the existing security fence.

The Conservation Plan is to be based on the Guidelines to the Burra Charter Conservation Policy.

This requires the report to be prepared in two parts being firstly the assessment of cultural significance, the second part to include the conservation policy.

Site inspections have been made on 26th October 1993, 25th November 1993, 12th February and 5th March 1994. The inspection on 25th November 1993 was in company with Mr John Scott the Chief Engineer with Bunning Bros Pty Ltd at the time of the building the mill.

The inspection on the 12th February 1994 was to produce a plan of the mill. The visit on 5th March 1994 was to interview Mr Bernie Hubery in Bridgetown a long time member of the mill staff.

1.2 DEFINITION OF THE SITE

The Donnelly River Mill is located 32 kilometres from Bridgetown and 27 kilometres from Manjimup in the south west of Western Australia. A district plan is included in Appendix 1.

The mill is located in a picturesque setting at the junction of the north and south branches of the Donnelly River at map reference. 115° 58' 30" 34° 06' 20" *Latitude* ✓

Longitude and
Section 5 includes the buildings and plant within the site to be assessed.

The site is within a 66 hectare reserve (37707) vested in the Western Australian Tourism Commission and leased to the Donnelly River Holiday Village (Briefcase Holdings Pty Ltd) for a period of 50 years commencing August 1982. The school is a separate reserve (24298).

An overall plan of the area is shown on Bunning Bros Pty Ltd Plan 10531 prepared in 1974 four years prior to the Mill closure. The Plan is included in Appendix 2. This plan shows details of all the main buildings associated with the Mill together with the townsite details including housing, school, boarding house, club etc.

This study specifically refers to the Mill the primary structures being the Mill, boilers, Sawdust Bin, Winches, Chimney Stacks, Sorting Table closest to the Mill, Pre-cut Building, Kilns, Fire Hole and connecting conveyors.

The principal items of equipment are shown in the plan included in Appendix 3 the significant items being as follows:

Robey Steam Engine & Flywheel
Bellis and Morcom Steam Engine and Alternator
Steam Winchs
Steam Water Pumps

Log Carriage and Traversing Steam Turbine
Overhead Winches
Twin Saws and Power Rollers
Bench Saws 1,2,3,4 and Powered Rollers
Dockers 1,2,3 and firewood Dockers and Powered Rollers
Fruit Packing Case Saws
Drive Shafts and Operating Mechanisms Under the Mill Floor
Saw Dust Conveyors under Mill Floor
Waste and Firewood Chutes

Sorting Bench Mechanisms
Four Babcock and Wilcox Boilers
Three Steel Chimney Stacks
Fire Chute and Hole

With the exception of the sorting table all the above structures and equipment ~~are not leased~~ and remain with the Tourism Commission.

The following structures shown on Plan 10531 in Appendix 2 are part of the Donnelly River Holiday Village operated by Briefcase Holdings Pty Ltd and are listed below:

MILL HOUSES 2 TO 30 INCLUSIVE AND NUMBERS 32, 35, 36, 37 AND 38
GENERAL STORE
BUTCHER SHOP
PLAYGROUND MEETING ROOM
MILL OFFICE AND TOILET BLOCK
OIL STORE AND PARTS STORE
GARAGE AND WORKSHOP
NO. 1 MILL SORTING TABLE
NO. 2 MILL SORTING TABLE
MILL STORE AND WORKSHOP 40' x 30'
LOCO SHED
BOARDING HOUSE
25 HP Electric Motor
3" Stalker Water pump
Motor Starter
2 Only 500 Gal. Fibreglass Tanks
V 100 Chlorinator
Water Rising Mains, Distribution Pipe Lines,
Power Lines to Pump and Control System
3 x 2100 Gallon Tanks Installed as a Reserve
Against Pump Failures and Fire
Houses and 33 are Subleased to Bunnings

The Clubhouse, tennis courts, and recreation ^{oval} ~~overall~~ do not appear to be part of the Briefcase Holdings ~~lease of the~~ Holiday Village (Reference 16).

The deed of lease appears to obligate Briefcase Holdings to operate the village for the period of the lease for the purpose of tourism, however it also appears that Briefcase Holdings has the right to remove the buildings previously listed as part of the Holiday Village within 3 months of the expiration of the lease or sooner determination of the lease.

1.3 CURRENT SITUATION

The Donnelly River Mill was a fully operational mill for 29 years up to the time of closure.

Changing technology resulted in much of the original mill and equipment remaining, whereas in the past a mill closure generally resulted in much of the equipment being transferred to equip another mill at a new location.

loan the steam engines
Bunnings Ltd agreed for the mill including the equipment to remain intact to perform a historical role, and reserved the right to remove the equipment if the historical function was not achieved. (Refer Bunnings letter Appendix 10).

The kilns have been dismantled although the foundations remain, and the planer building and No. 2 sorting table including equipment has been removed.

The remaining sections of the original mill which represents a large proportion of the key operational components remain, and these are enclosed in a wire fence restricting entry.

As previously outlined a large number of the original mill houses, club, boarding house, office and recreation facilities remain and are being utilised as short stay tourist accommodation, in addition the original locomotive sheds are being converted for accommodation.

These remaining components of the mill town provide the opportunity for tourist visitors to inspect the original operating components of the mill to illustrate the past history of the mill and the past technology used in the timber industry.

At present visitors are shown over the mill in controlled groups there being no other utilisation of the site at present.

1.4 OTHER ISSUES

The history of the timber industry has been the subject of a number of studies. It is not the intention to cover the historical past of the industry in this report.

The object is to consider the operational components of the mill which remain as an illustration of past technology and so illustrate the role of the mill and the degree to which the existing features represent a rare example of previous technology used in the timber industry.

2.0 ANALYSIS OF CULTURAL HERITAGE SIGNIFICANCE

2.1 DOCUMENTARY EVIDENCE

Bunnings Bros Ltd held sawmilling Permit 667 under the Forest Act 1918 at Donnelly River and Yornup covering 39391 hectares of crown land. (Reference 1)

A small timber mill known as Wheatley's Mill had operated in the area during the period of the First World War. (Photo 1)



1. Photograph Of The Original Wheatley's Mill At The Donnelly River Mill Site.

Plans for a new mill on the Donnelly River were commenced by Bunnings Bros Ltd in 1947. Due to the larger sized karri timber in the forest, the mill was designed to be equipped with heavier equipment capable of handling the larger karri with logs up to 2.5 metres in diameter. (Reference 2)

Due to the remote location the usual practice was followed for the mill to be steam driven, the Donnelly River being able to provide abundant fresh water to supply the steam boilers and also the mill town.

The river was named the Donnelly in 1831 by Lieutenant William Preston after his wife's brother Ross Donnelly Mangles the brother-in-law of Governor Stirling. (Reference 2)

The site chosen for the mill was a picturesque one set in the valley, adjacent to the river amongst the karri forest acknowledged for its beauty, which is still evident today.

With the end of the Second World War there was a tremendous demand for housing, domestic housing having been at a standstill since the 1930's depression. The demand for timber could not be met with existing mills and equipment. (Reference 3)

Bunnings investigated the development of new mills at Tone River to cut timber from the Nyamup Permit No. 1192 (23379 hectares) and at Donnelly Permit No. 667 (39,391 hectares).

The concept at the Donnelly River Mill and its bush operations was to advance the technology used in the industry. (Reference 4)

A 19 kilometre railway to Yornup Mill and the rail head needed to be extended to Donnelly, however the bringing of logs to the mill was to be primarily based on Army surplus Diamond T motor truck prime movers. (Reference 5)

The mill was designed with powered rollers to assist with conveying timber through the mill together with a change in level through the mill to obtain gravity assistance in moving timber.

The aim at the mill, as was customary, was to balance production between the heavy section timbers such as rail sleepers, wharfing timbers and lighter building timbers to minimise waste. (Reference 4)

The mill site pegging commenced in 1948 and the mill was in operation in 1949. Together with the mill a well planned town was constructed with a school, workers club, and recreation ground. (Reference 4)

From 1950 the mill produced 21,600 loads of timber per annum, increasing to 26,400 loads from 1961. A load represents 50 cubic feet of timber. (Reference 13)

The source of power for the mill was steam, this being generated by three Babcock and Wilcox boilers, purchased from Katanning Flour Mills in 1948 supplying steam to a single cylinder horizontal steam engine built by Robey's of Lincoln England purchased in 1948 from the Onkaparinga Woollen Mills in South Australia being first installed there in 1922. Electric power for the mill and town was generated from two Bellis and Morcom vertical steam engines directly coupled to alternators to generate electric power. (Reference 6)

One of these engines was a 432mm (17 inch) bore and a 280mm (11 inch) stroke high pressure engine made in 1924 and purchase from the Renmark Irrigation Trust in South Australia. The other was purchased from Jason Industries Ltd of Welshpool, Western Australia. (Reference 6)

One of the Bellis and Morcom engines has been removed and is installed at the Bunnings kiln area in Manjimup, the other still remains in position at the Donnelly Mill together with the Robey engine.

The Robey engine had a bore of 533mm (21 inch) and a 610mm (24 inch) driving a 3048mm diameter (10 feet) flywheel at 160 revolutions per minute.

The drive for the mill was by means of rope belts from the Robey engine driving large diameter pulley wheels installed below the floor with belt drives, also below the floor of the mill, driving the bench saws and powered rollers of the mill.

This belt, shaft and pulley system is complex and illustrates the techniques required to provide power to all the mill equipment from a single power source.

A diagrammatic layout of the drive system is included in Appendix 3. Nearly all this drive system remains in position.

There are also several electric powered saws and conveyors in the mill utilising electric power generated by the Bellis and Morcom engines.

Kiln seasoning of timber was also a feature of the mill and although only the foundations of the kilns remain, the steam boiler providing steam to the kilns remain in position.

The fuel for the steam generation boilers was mostly waste timber and sawdust from the mill operations.

Logs as they entered the mill were handled by a system of winches to load timber onto the traveller carriage feeding to the twin saws. This equipment remains in position.

A description of the movement of timber through the mill is outlined in Section 2.2.4 of this report.

A report prepared by the then Forests Department in February 1955 on the development at the Mill is included in Appendix 5. The closure of the Mill was reported in the Warren and Blackwood Times on 5th July 1978 (Appendix 12). Bunnings Ltd agreed in a letter dated 29th September 1980 to the Forest Dept to ~~leave~~ *leave* the mill intact.

The list of plans held by Bunnings Ltd in their engineering archives is listed in Appendix 9.

The Bunnings company engineering archives are now located at the Manjimup engineering office.

The early plans of the Mill are not available the archive plans being mainly of subsequent additions although the existing plans do provide essential basic information. Plan 10531 in Appendix 2 is evidence of this, although the plan was prepared in 1974. Also Plan 1230 prepared in 1957 in Appendix 7 provides details of the kiln buildings.

The working up of the design was principally developed through a model of the proposed mill.

The millwright was Mr Harry Martin who built the office first divided into a planning room and living quarters.

Harry Martin built a one twelfth scale working model of the new mill in the planning room which was used to develop the design including the power rollerways for moving timber. The key participants with Harry Martin were Charles Bunning, John Scott, Bernie Johnston and Wilf Dwyer (Reference 4 and 5).

Details of Charles Bunning and John Scott are included in Appendix 16.

2.2 PHYSICAL EVIDENCE

2.2.1 General

This study relates particularly to the Donnelly River Mill, however a feature is not only the high proportion of the mill structures and equipment still remaining but also the extent of the remaining mill office, workshop, housing, school, boarding house, recreation areas and club. (Site Plan Appendix 2, Photo 2).

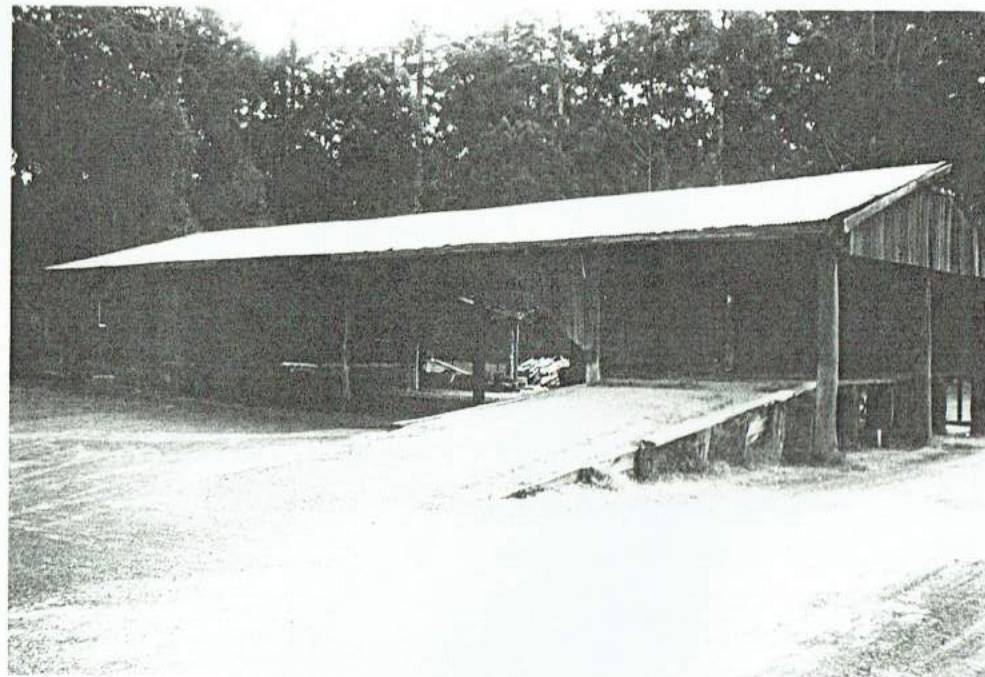


2. Photograph Of Existing Mill Town Housing, School etc.

All these aspects represent the features of timber mills and the integration of the town with the mill.

Careful consideration was given to the siting of the mill to take advantage of the sloping nature of the ground assisting the movement of timber through the mill, and to also ensure that smoke from the mill operations was moved away from housing by the prevailing winds.

The buildings outside the mill perimeter fence include the office which is now utilised as a restaurant, and also the vehicle workshop which is used as a maintenance workshop for the remaining houses. (Photo 3)



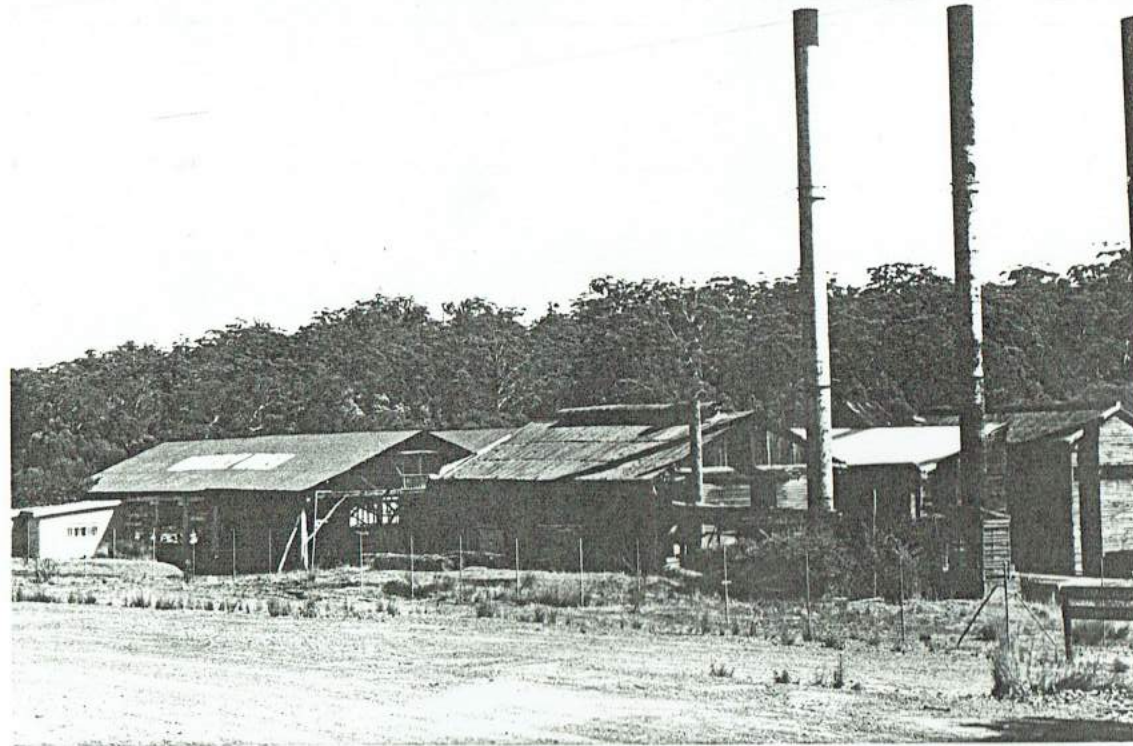
3. ^{Existing} Photograph Of Original Maintenance Workshops.

The locomotives shed is also outside the perimeter fence and this is currently being modified to provide further short stay tourist accommodation. (Photo 4)



4. Converted Locomotive Shed. *February 1994*

The mill is almost as complete as originally constructed, the dominant feature being the mill building roof under which all the mill working areas are located including saws, benches, steam engines, boilers and winches. The three ~~metal~~ ^{steel} chimney stacks are also a dominant feature. (Photo 5)



5. ^{Existing} Photograph Of The Mill. 1994

One of the timber sorting sheds under a separate roof remains and also the area used for burning waste timber.

The kiln foundations remain although the kiln structure has been removed. Plans of the kilns are available. The Planer building and equipment has been removed.

(Appendix 7)

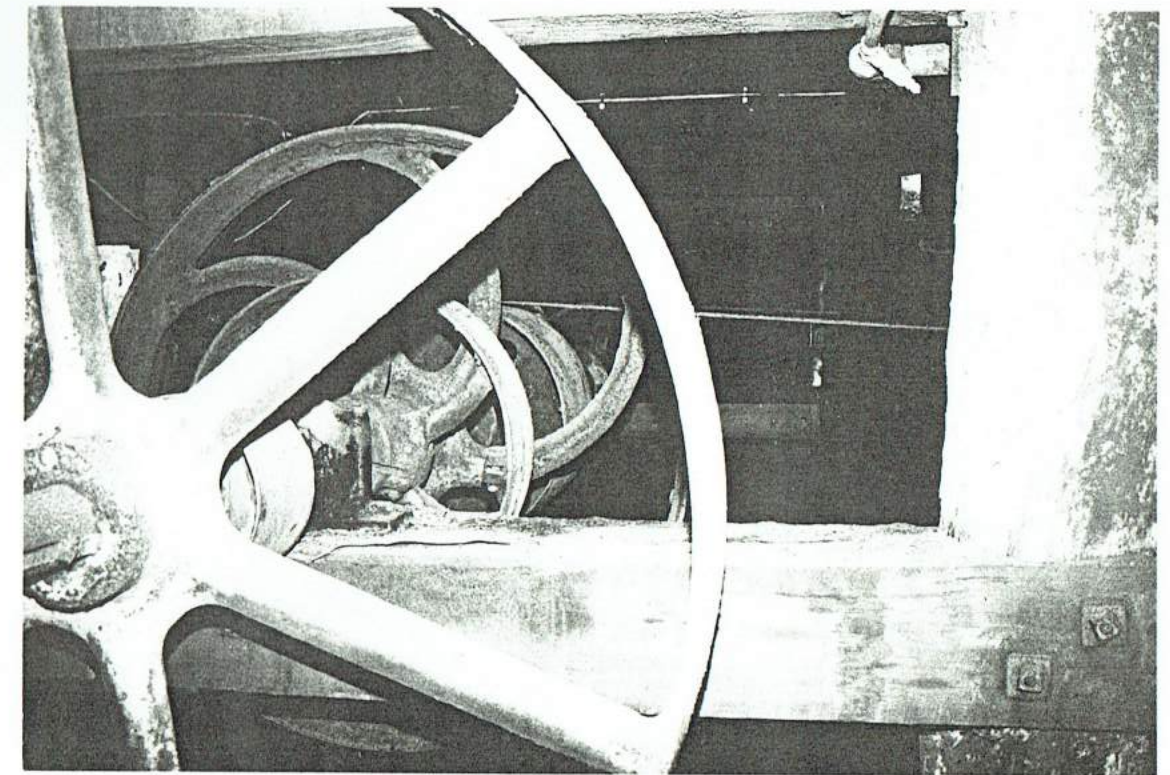
2.2.2 Basic Mill Structure

The basic structure of the mill is the mill floor which supports the operating equipment above the floor and also the drive shafts, pulleys and belts under the floor. This is different from the usual practice in workshops with drive shafts and pulleys in the roof with belt drives coming down onto the work benches, however below the floor drive equipment was the practise in timber mills. (Photo 6)



6. ^{Existing} Section Of Mill Benches. 1994

The purpose of all drive equipment being below floor level is to achieve an open path for the movement of timber through the mill and also improve safety. (Photo 7)



7. Drive Shafts Under The Mill Floor Providing Direct Power From The Robey Steam Engine To The Mill Equipment. 1994

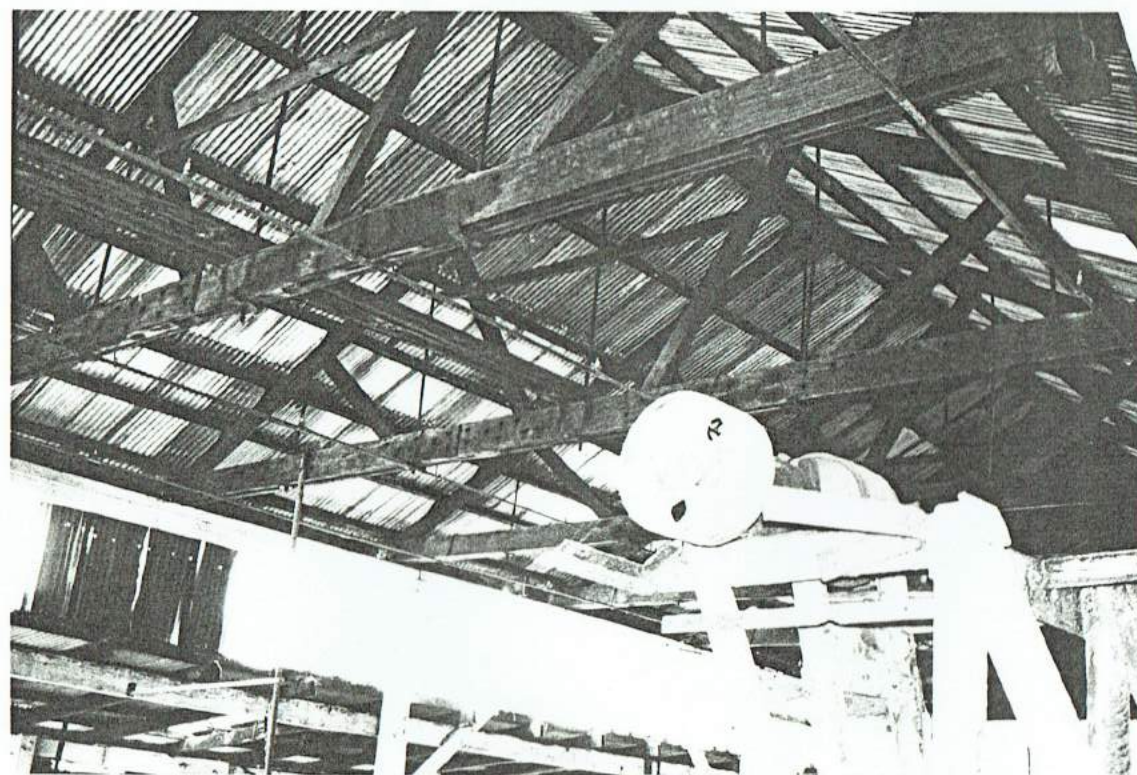
An inspection of the operating floor support structure indicated this to be in reasonable condition, although sections of the floor boards are in need of maintenance. The entire floor support structure consists of heavy bush timber braced with sawn mill timber. Further details are included in Section 5 of this report.

2.2.2.2 Roof Structure

The prominent feature of the mill is the roof under which nearly all the mill equipment is located.

The roof is made of two pitched segments joining at a central box gutter sheeted with standard corrugated roofing material.

The support structure is all of timber construction with the support columns consisting of round bush timbers with the roof timbers and beams constructed from sawn timber. The roof trusses are all timber construction. (Photo 8)

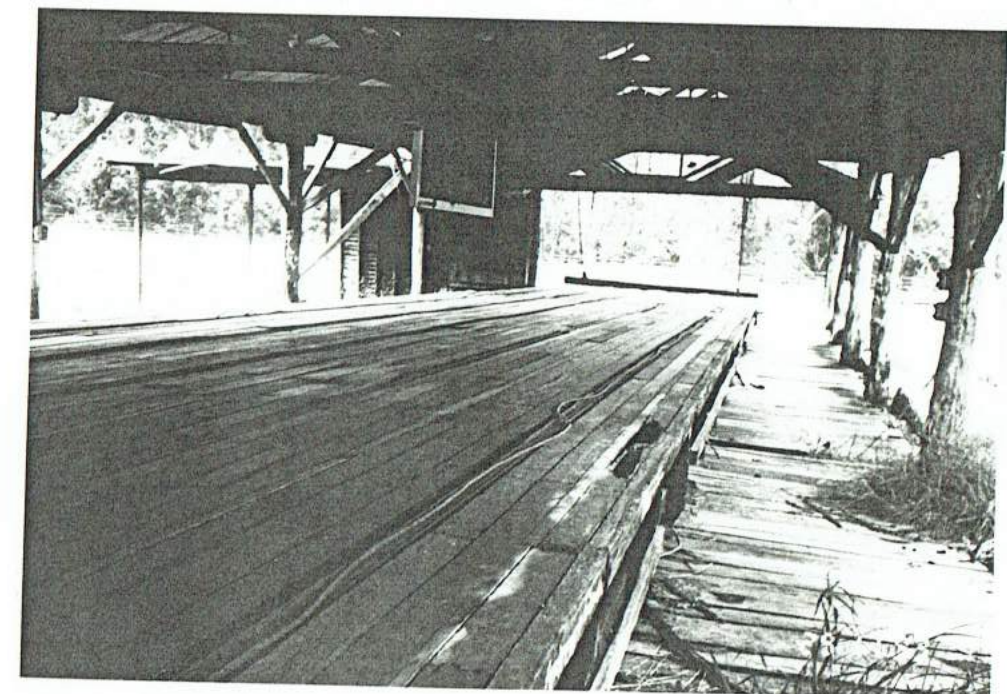


8. Mill Roof Timber Trusses. February 1994

The columns and roof timbers are structurally sound reflecting the original robust design. There is evidence of decay in some sections of the building which need to be rectified. Details are outlined in Section 5.

The other main area under roof is the sorting shed covering the moving cables at bench level. (Photo 9)

Again this is a timber structure supporting the bench cables and the roof being sheeted in corrugated iron. Details are included in Section 5.



9. Existing Timber Sorting Table And Structures. 1994

There are further structures at the east end of the building supporting the roof over the kiln boilers and also nearby workshops areas. (Photo 10)

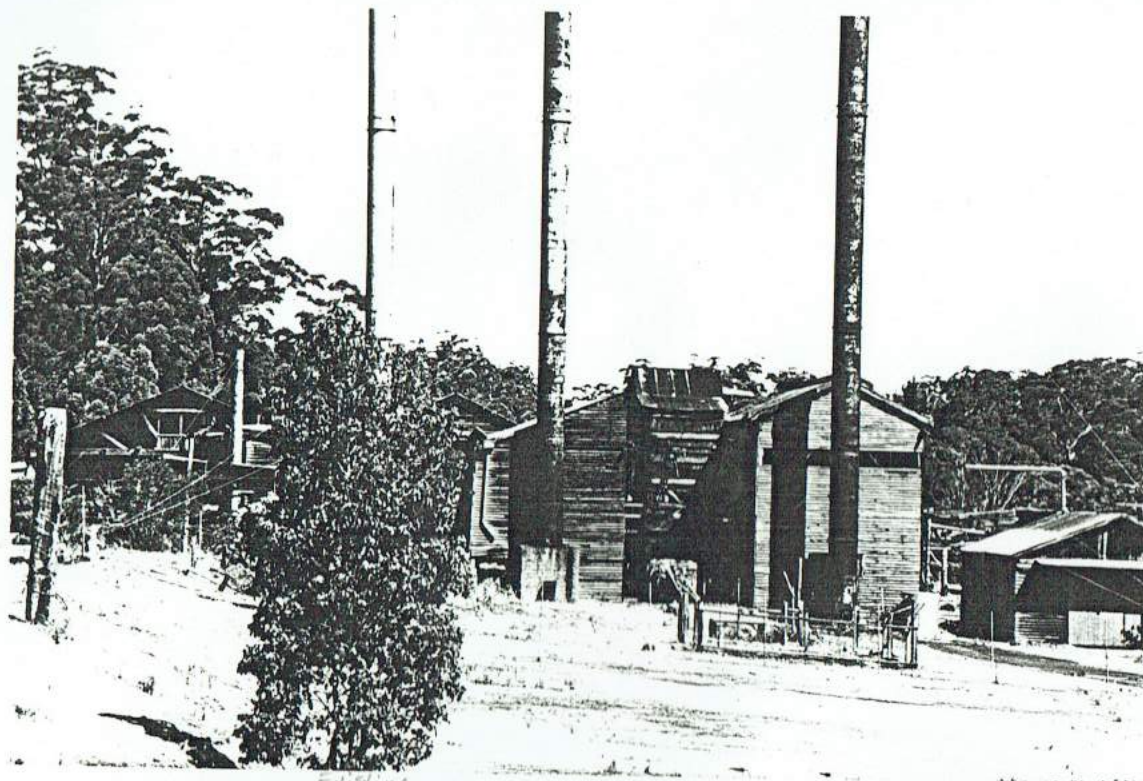
These structures are in reasonable condition although also in need of maintenance. Refer Technical Report Section 5.

Sections of the corrugated iron roofing are in need of repair.

2.2.2.3 Chimney Stacks

There is a chimney stack for each of the two Babcock and Wilcox boilers used for generating steam for the three steam engines, and a third for the boiler generating steam for the kilns. (Photo 10)

These stacks are 20 metres in height of steel construction with anchored guy ropes providing for stability.



10. Photograph Of The Three Babcock And Wilcox Boiler Chimney Stacks. *EXISTING 1994*

The stacks are in reasonable condition and all still supported by guide ropes. A technical report for these stacks is included in Section 5.3.1.14

There is a smaller chimney providing for exhaust of steam from the steam engines.

2.2.3 Equipment

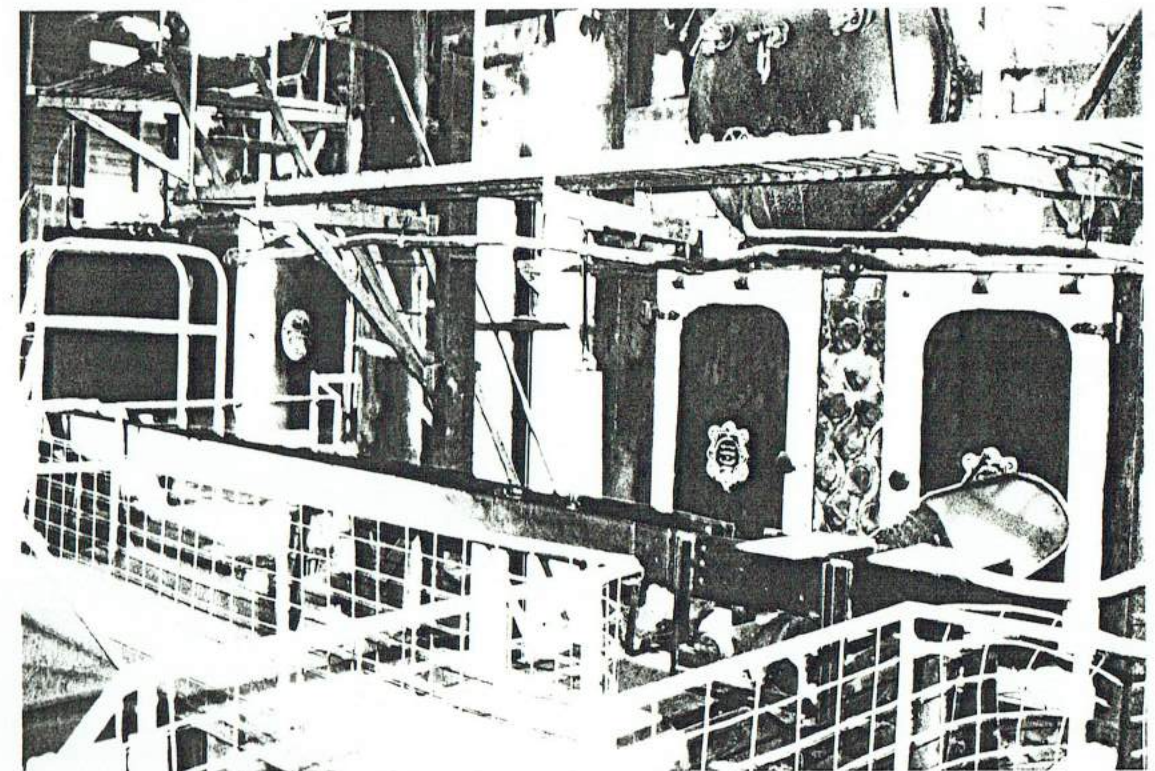
2.2.3.1 General

The equipment is covered in the following sections commencing with the steam power generation and prime movers of the mill following in the order of equipment used to process timber through the Mill. These components are shown on the mill plan included in Appendix 3.

2.2.3.2 Steam Generation

The source of water for steam generation and domestic use was from the nearby Donnelly River.

The Babcock and Wilcox boilers generating steam for the engines are under a roof area at the eastern end of the mill and protected from the weather. (Photo 11)



11. Photograph Of The Babcock And Wilcox Boilers. *EXISTING 1994*

Although under a separate roof the boiler generating kiln steam is also protected from the weather.

The original construction of these boilers was of a high standard the brick housing and support structure being in good condition.

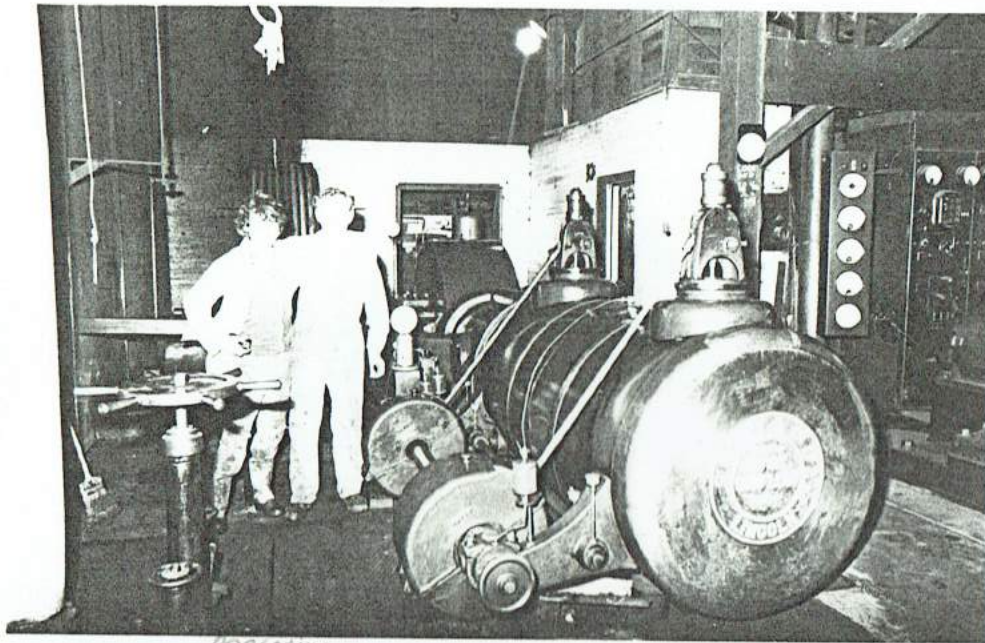
The boiler stairs and walkways at various levels are all of steel construction in reasonable condition.

The pipes distributing steam from the boilers nearly all remain.

The boilers, walkways and steam pipe distribution system are nearly all complete, although as to be expected there is some evidence of corrosion.

2.2.3.4 Steam Engines

The three steam engines originally at the Mill are listed in paragraph 2.1. The Robey Engine which provided direct belt power to the mill equipment remains in position together with the flywheel and rope drive. (Photo 12)



12. Photograph Of The Robey Steam Engine. 1978

The Bellis and Morcom steam engine direct coupled to an alternator generating electric power located adjacent to the Robey engine remains in position.

The other steam engine generating electric power has been removed although the engine block remains.

It is understood that this engine was relocated to Bunnings works in Manjimup as standby power obtaining steam from the kiln steam boiler there.

These engines are in excellent condition although possibly in need of maintenance to ensure that corrosion does not occur.

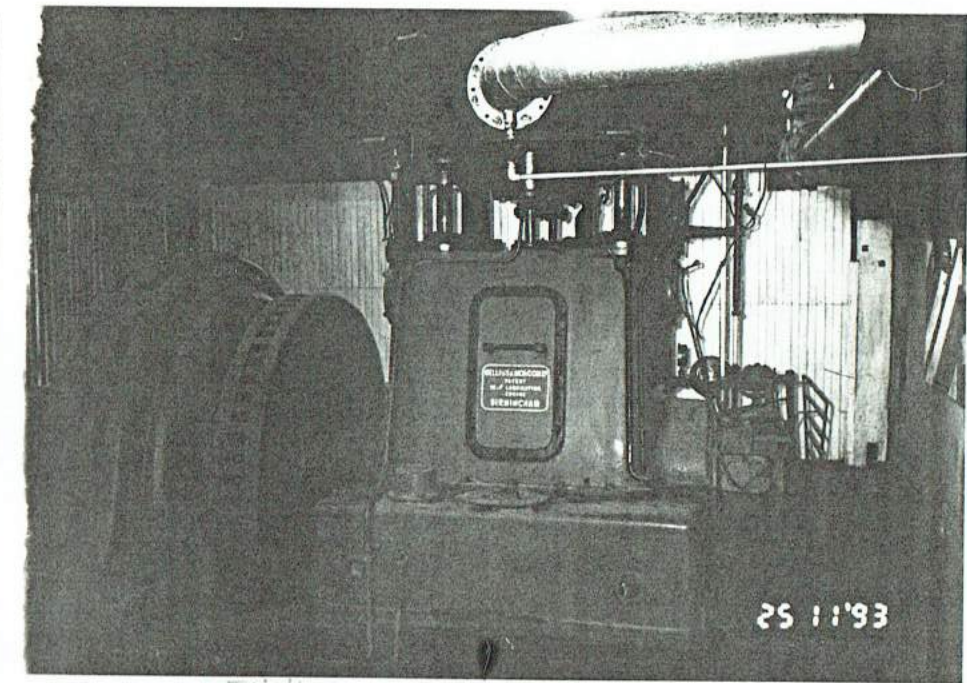
All the steam engines are under the roofs and are protected from the weather by the roof and side walls.

A diesel engine was also installed adjacent to the steam engine to generate power at night during periods of low steam pressure, this has been removed.

2.2.3.5 Electric Power

An electric switch room and equipment was housed adjacent to the two steam engines generating electric power, however all the switching equipment and switchboards have been removed.

One power generating steam engine the Bellis and Morcom remains in position in good condition. (Photo 13)



13. Photograph Of The Bellis And Morcom Steam Engine. 1993

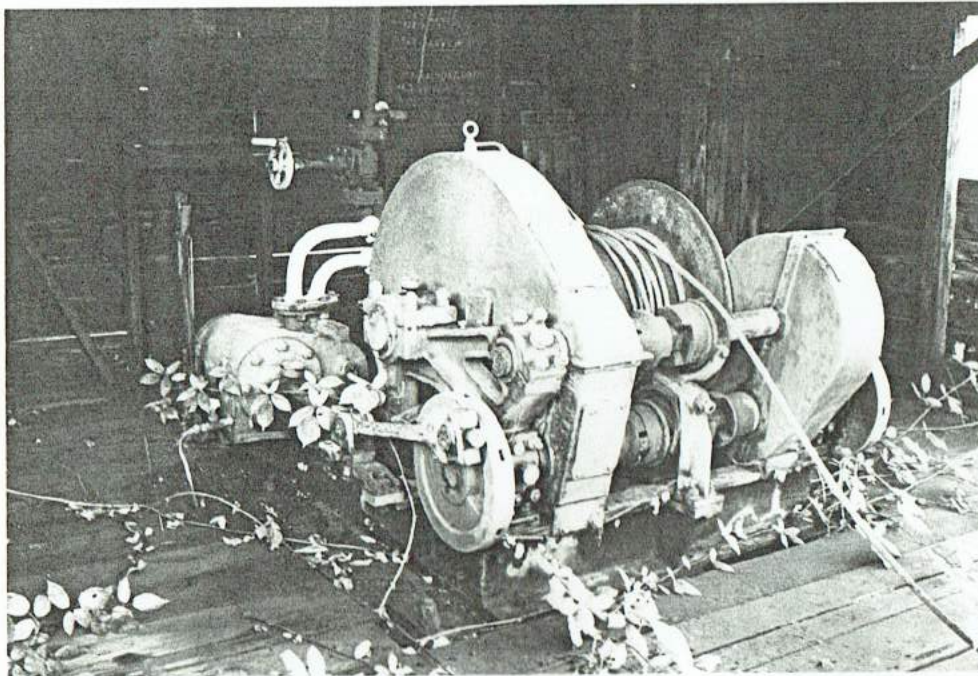
There is now a power supply from the State Energy Commission distribution system connected to the room containing the steam engines, the below floor main drive area and the original saw sharpening room providing electric light.

2.2.3.6 Log Handling Equipment

The logs were unloaded on the north side of the building and were off loaded from the log hauling trucks by a winch (Appendix 4).

There was also a winching system enabling logs to be loaded onto rail trucks for transport 19 kilometres to the Yornup Mill and also a winch system to load the logs onto the traveller trolley for movement into the mill and the twin saws.

The winching system for handling logs into the mill remain. One winch is understood to be from a whale chasing boat, used for hauling in the whales. (Photo 14)

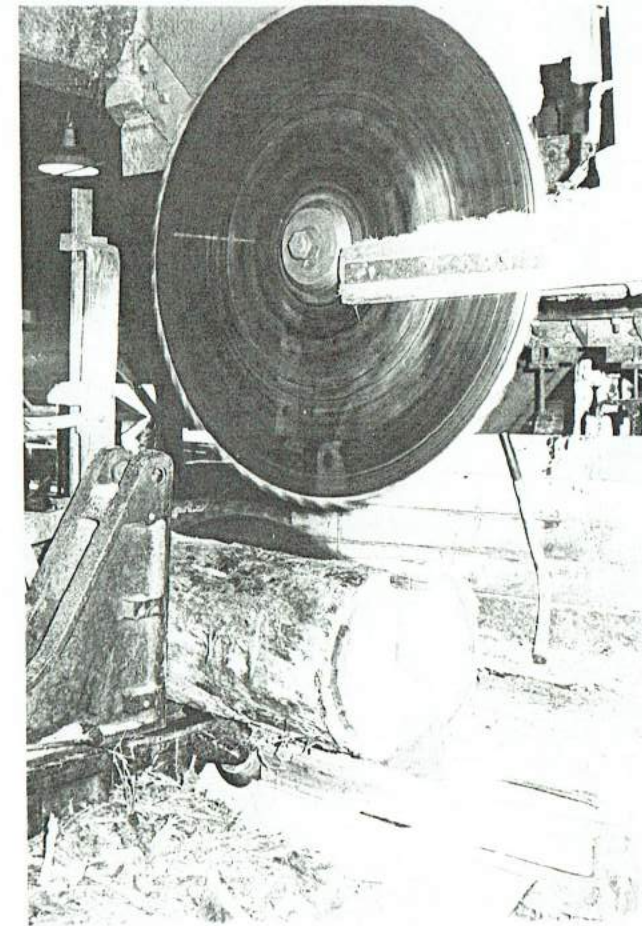


14. Log Handling Winch *As Existing 1994*

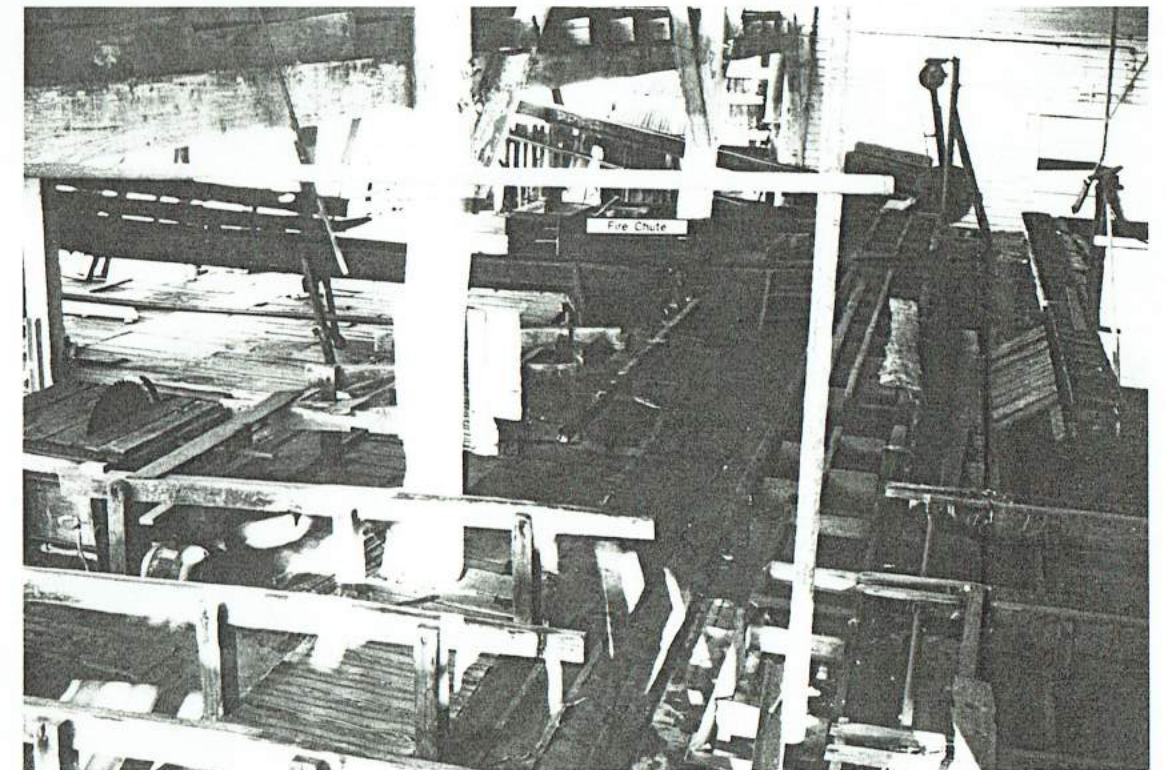
An overhead winch for positioning logs on the traveller log carriage also remains. (Photo 45)

The twin saws whose function was to make the first log cuts remain in position. (Photo 45)

The travelling carriage for moving logs through the twin saws remains. (Photo 15, 20)



15. Travelling Carriageway Feeding Logs to the Twin Saws. *1978*



16. *Existing* Powered Bench Roller. *1994*

All the bench rollers and saws remain together with the moving feed trolleys and rails. (Photo 16)

The packing case benches remain together with the inclined conveyer system transporting waste material to the burning area.

As previously indicated the shaft and pulley drive system under the mill floor remain although the belt drives are not in position.

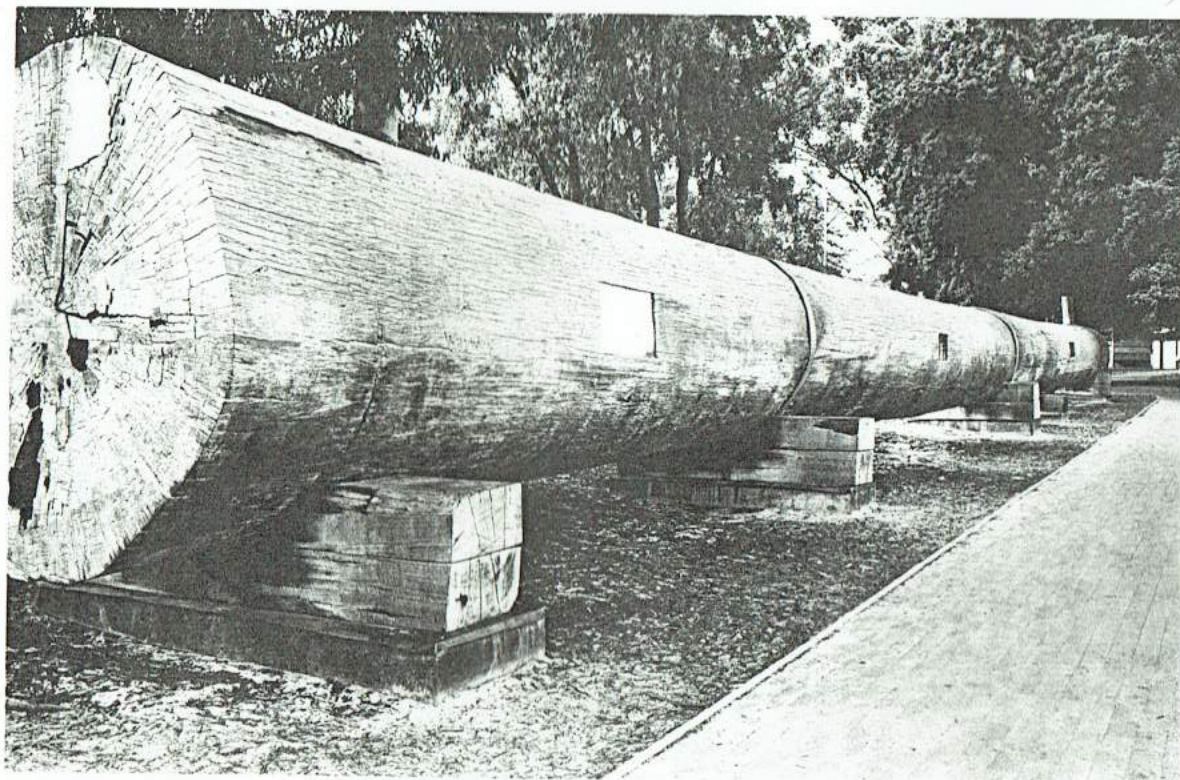
The conveyer system for the collection of saw dust from the bench saws remain together with the conveyer system feeding the sawdust to the kiln boilers.

As the sawn timber of various sizes came out of the mill it was sorted on a system. This system remains. (Photo 9)

2.2.4 Mill Operations

In describing the mill and its equipment it is first necessary to outline the system of log handling at the mill and the log sawing processes.

It is also necessary to emphasise the range of log sizes entering the mill. An example of this is "The Elizabeth Karri Tree" displayed in Perth's Kings Park and obtained from the Donnelly forest this tree being 32.3 metres long and 2.4 metres in diameter. (Photo 17)



17. "Elizabeth Karri Tree" Kings, Park, Perth. 1994.

Appendix 2 and 3 includes a layout plan of the mill and its main areas of operation. Appendix 4 includes a plan showing the path of logs and sawn timber through the mill and should be referenced as part of the following description.

2.2.4.1 Log Handling

As logs entered the mill the following factors had to be considered:

1. The species being milled.
2. The log size and quality.
3. The "order book" or the customers requirements.
4. The stock requirements.

All these factors are taken into account from the time each log reaches the mill landing and are again taken into account at each stage of production so as to achieve the maximum value from each log and the maximum percentage of recovery of saleable timber.

This is best illustrated by following a log through the various processes as it progresses through the mill.

1. ^K Hoodman on the log landing is responsible for assessing each log and cutting it to lengths required to fulfil the specific orders having regard to quality and length requirements.
2. The twin sawyer who receives the log on the log carriage must again assess the log with respect to species and quality and will decide how best to arrange the cuts having regard to defects and in the requirements of the "order book".

The number 1 benchman assesses each flitch received from the twin sawyer again keeping in mind all the relevant factors.

He will look first at the large sections required by the order book and either cut that order or pass suitable sized flitches to allow the Number 2 benchman to fulfil the moderate section orders.

He in turn will assess the timber received from the No 1 bench and will probably seek to produce the bulk of the requirements of the "order book".

Material received at the No 3 bench will be converted into stock sizes such as scantling, boards and joinery sizes.

No 4 bench will usually produce less valuable products such as pickets.

A fifth bench will receive material from the No 2 and No 3 benches to be converted into fruitcase material usually in karri only.

Another factor to be considered at each stage of production is whether the product should be quarter or back sawn as outlined in the next section.

The duty of the mill foreman (or mill boss) as he is usually called, is to ensure that each benchman and operator is aware of all the relevant factors affecting his decision which have such an important bearing on the efficiency of any mill.

(Photo. 14)

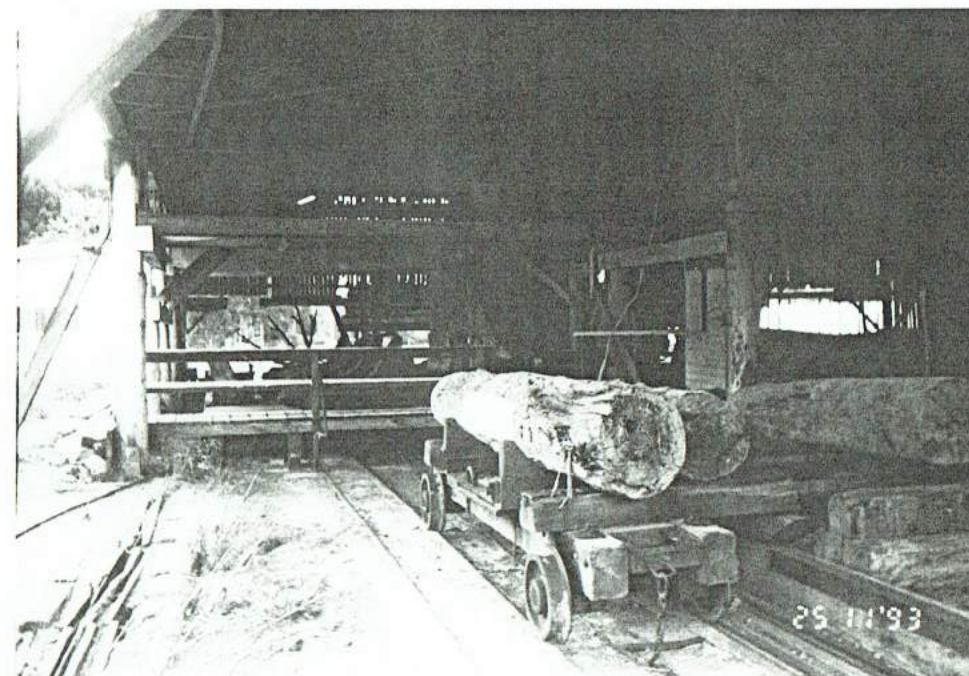
Logs carried from the bush were snigged from the log trucks into the storage stacks by means of a steel cable operated from winch A. This was carried out by the hookman, and as the logs were unloaded the logs were measured by the measurer for length, girth, brands of fallers and haulers recorded in the mill book. This information being required for the calculation of royalties, and the payment of the bush workers who worked on piece rates. The logs rolled down the steep skids from the log truck shaking the ground and coming to rest with a "thud" against the chocked log at the front of the landing.



18. Logs Being Delivered To The Mill. 1978

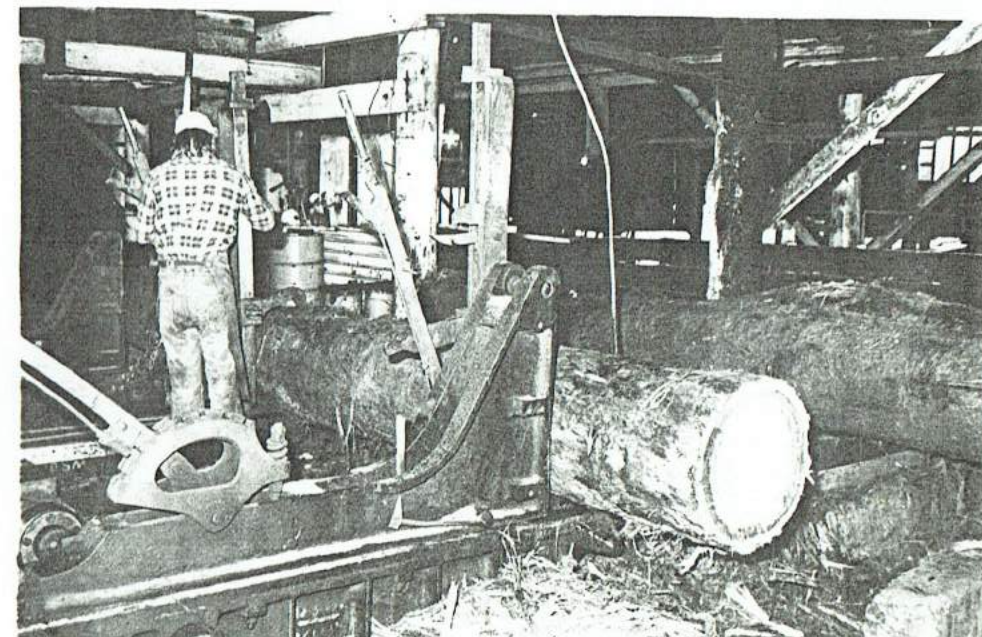
The foreman and hookman marked the logs to suit the timber orders to be cut and the length the log was to be docked.

Progressively logs were cut to length and further "snigged" onto a log trolley operating on steel rails for storage on skids (Photo 19) under the mill roof.



19. Logs Being Unloaded From The Log Trolley ^{existing and} Onto The Storage Skids. 1993

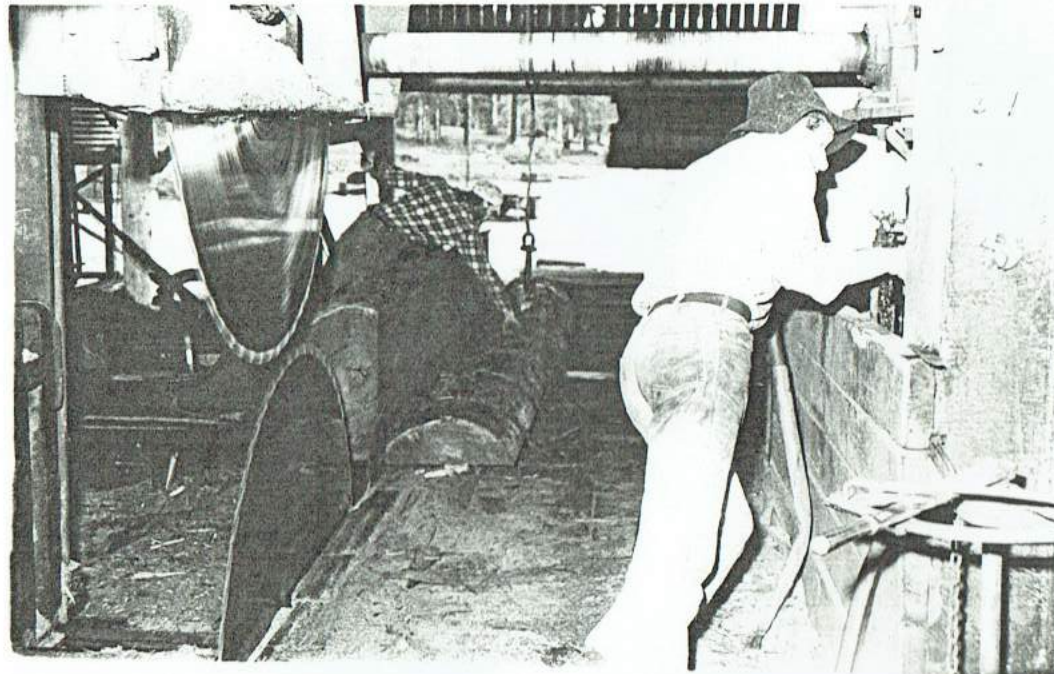
Logs from the storage skids were rolled with winch assistance onto the traveller carriage for movement through the twin saws. (Photo 20)



20. Logs Being Loaded Onto The Traveller Carriage. OPERATING MILL 1978

The traveller carriage moved up and down rails in both directions by steel cables operated by a steam turbine winch, the drum being located between the rails.

The twin saw operator had the task of assessing each log and determining the first breaking down cuts to ensure the maximum amount of timber yield and the isolation of defective sections of the logs, and also considering the order. (Photo 20) The first log cut was the responsibility of the "spotter" operating the twin saw, one of the most important tasks of sawmilling at the mill.



21. First Breaking Down Cut In The Twin Saws. OPERATING MILL 1978

2.2.4.2 Traveller Carriage and Twin Saws

As outlined the log breaking down cuts were carried out by the twin saws.

The logs were first positioned on the traveller carriage and the logs locked into position before the traveller carriage fed the log through the twin saws. As the log entered the saw the swamper drove wedges to keep the cut from pinching the saw, then dog chains were driven into the cut off piece to keep it from rolling onto the roundside.

The breaking down of the log into a number of flitches capable of being ^{handled} by the subsequent saw benches and crews required the log to be passed back and forward a number of times through the twin saws.

The segments of logs cut during the twin saw breaking down phase are termed flitches. The following figure 1 (from Reference 12) illustrates the twin saw primary cuts for logs of various sizes.

In order to produce sufficient flitches to maintain productivity at the subsequent breast saw benches it was necessary for the twin saws to operate for additional time beyond normal mill hours.

The guides on the platform adjacent to the path of the traveller carriage were used to assist with the positioning of logs on the traveller carriage.

Flitches cut of sufficient size for later handling were unloaded onto the rollers and powered skid chains for feeding the No. 1 saw bench. (Photo 22, 23)

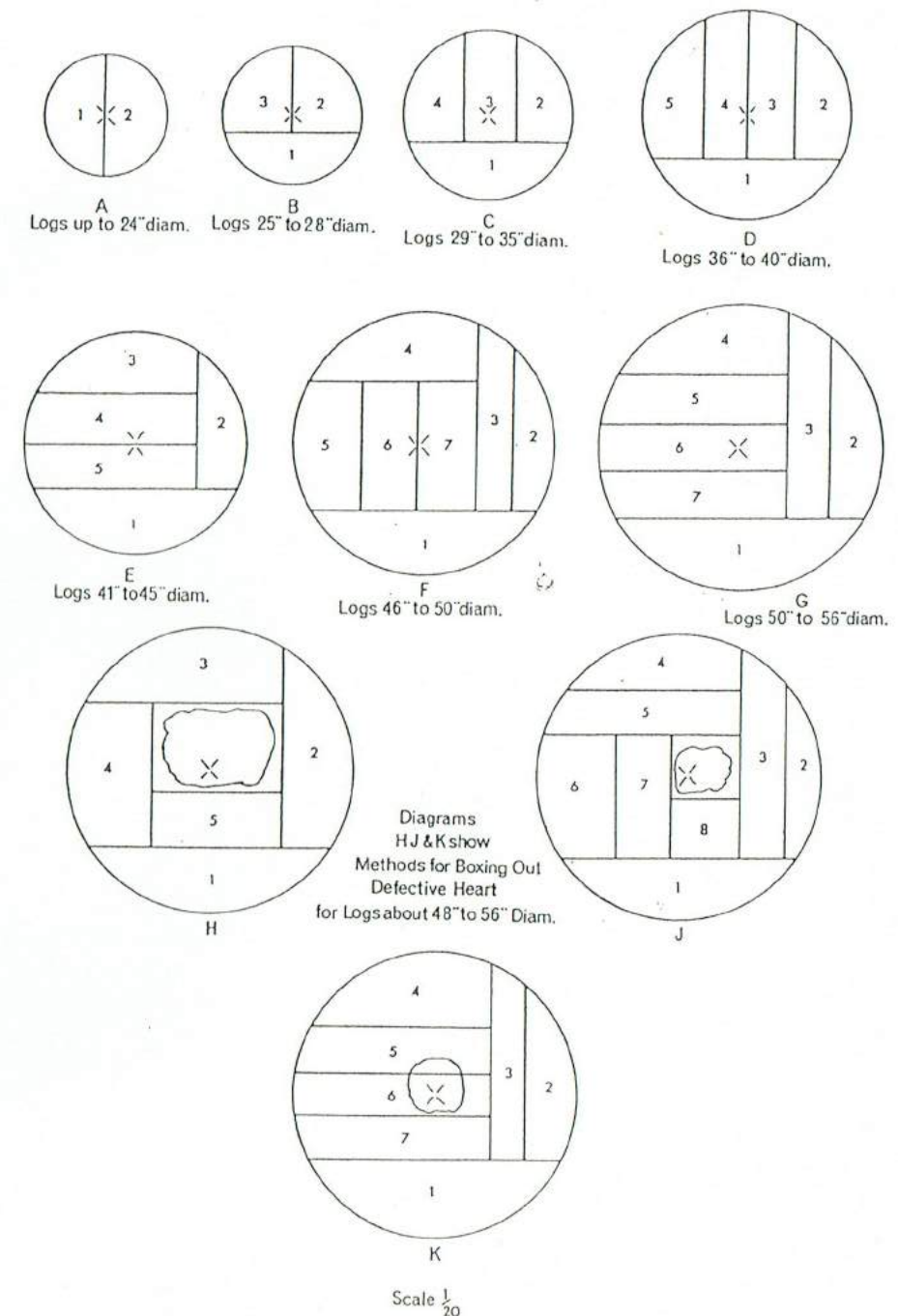


Figure 1. Methods of breaking-down logs of various sizes with twin circular breaking-down saws.

Figure 1.



22. Flitches On Skids For Delivery To The No. 1 Saw Bench. *OPERATING MILL 1978*

2.2.4.3 Saw Benches

(Photo 24)

The flitches were positioned on a rail mounted trolley and assisted by the power rollers on the bench for further sawing to produce the larger timber sizes. To achieve this the flitches were passed through the No. 1 saw bench several times. This work was the responsibility of the benchman who was also responsible for positioning the flitch for easy handling. At the side of the bench was the leverman whose job was to drive the flitch over the bench with the aid of the friction rollers at each end of the bench. He also placed the pin in the correct hole to cut the required timber size. This size was indicated by the benchman using a code of signals as the mill noise made speech impossible.



OPERATING
23. ^ No. 1 Saw Bench. *1978*

On the other side of the bench were the "tailer outs" one of whom took away the cut piece of timber while the other guided the other piece back over the bench.

The sawn timber from the No. 1 bench passed onto the bench outlet skids which were equipped with powered rollers to move the timber onto the No. 1 saw bench powered rollers for movement of the larger sized sawn timber sections to the No. 1 docking saw to cut the timber to the required length.



24. Partly Sawn Timber Moving Through The Mill. *OPERATING MILL 1978*

The larger sawn timber sections were produced at the No. 1 bench. Depending upon the size of the offcuts they were moved along the powered roller skids for further cutting to produce smaller sized sawn timber at the other benches. Refer to figure 2 (taken from Reference 12). The larger sized timber cut at the No. 1 bench was moved along rollers for yard storage.

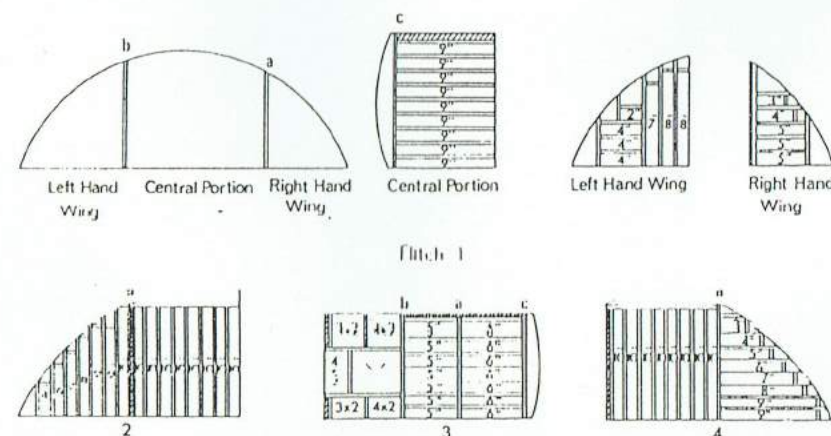


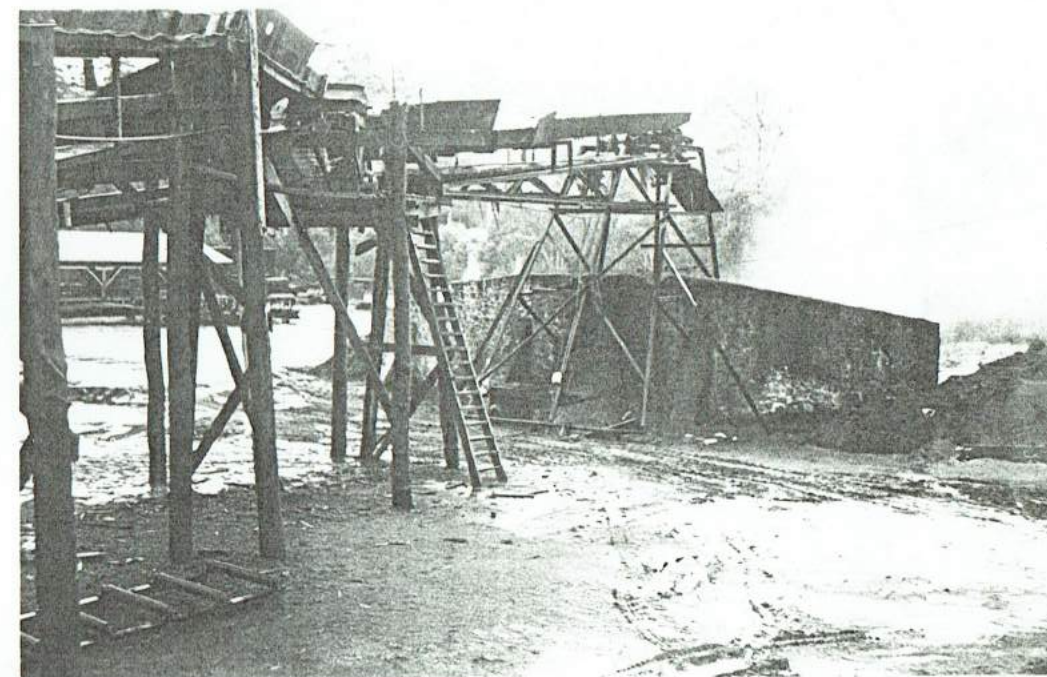
Figure 2. Details of cutting a 32-inch log on the breast-bench.

Figure 2.

Offcut timber from the No. 1 dockers was disposed into two hoppers discharging to conveyor belts under the floor. From first the hopper waste timber was transported by the conveyor belts to the fire hole for disposal by burning. The other offcuts considered to be suitable were placed in the second hopper for transport by conveying belt under the floor to the fruit case area.

Finished sawn timber from the No's. 2 and 3 benches and dockers saws were transported along a system of powered rollers and conveyor to the sorting table.

Other offcuts from the No's. 2 and 3 dockers were cut for disposal into the fire hole by the fire chute conveyor or to the fire wood conveyor. (Photo 25)



25. Waste Timber Conveyor To The Fire Hole. *Operating mill 1978.*

The sorting table onto which sawn timber for the No's. 2 and 3 ^{saw} ~~sawn~~ benches was transported consisted of an inclined bench equipped with moving wire cables let into the bench surface.

As the timber passed down the sorting table it was manually extracted according to size and length and stacked adjacent to the table prior to subsequent movement to the mill yard area or planer. All the saw docking benches, including the powered rollers remain and are in reasonable condition including the conveyor systems.

2.2.4.4 Fruit Packing Cases

A feature of the mill was the reduction of timber waste and the production of timber fruit cases assisted this function. A special production area consisting of 3 saw benches was incorporated into the mill for this purpose. This equipment remains.



26. Fruit Case Saw Area. *operating mill 1978*

2.2.4.5 Kiln Drying

A *Kiln* seasoning area was another mill feature, a steam boiler being constructed to supply steam.

Although the kilns have been demolished the foundations and the boiler remains,

2.2.4.6 Pre-Cut Area

The building remains although the equipment has been removed and also the rollers external to the building for timber handling removed.

2.2.4.7 Planner Area

The planner area producing dressed timber occupied a large area of the site (Appendix 2).

The planner equipment was useful at the time of the mill closure and was relocated for use elsewhere. The planner building has also been removed.

The rail line shown on the plan in Appendix 2 has been removed.

2.2.4.8 Sawdust Collection

The use of sawdust as a fuel for the boilers was developed at the Donnelly Mill. Although of low calorific value it proved for to be an efficient fuel for the steam boilers.

An extensive conveyor system was installed under the mill floor to collect saw dust from the twin saws and the other saw benches for transfer to the saw dust storage hoppers for later use in the boilers.

2.2.4.9 Fire Hole

Waste timber was burned in an area to the north of the mill behind a 4 metre high stone wall. (Photo 25)

Waste timber was conveyed to this location along two conveyors.

This equipment remains in position.

2.2.4.10 Mill Storage Yard

Sawn timber for the mill was transported to an area immediately west of the mill.

This area remains although the rails used to transfer timber to the area have been removed. (Photo 27)



27. Mill Yard Area. *OPERATION MILL 1978*

Plan 10531 in Appendix 2 indicates the rail line system used to move timber in the storage yard.

2.2.4.11 Second Sorting Table

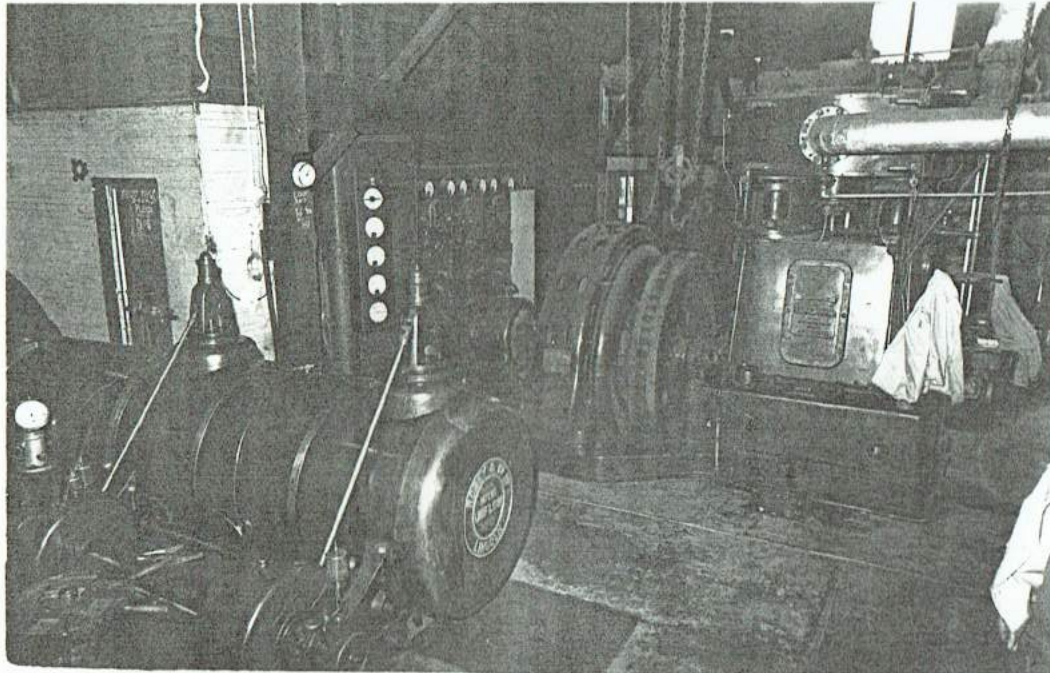
A second sorting table further to the west of the mill is shown on the site plan in Appendix 2 although this installation has been removed.

2.2.4.12 Power Generation and Distribution

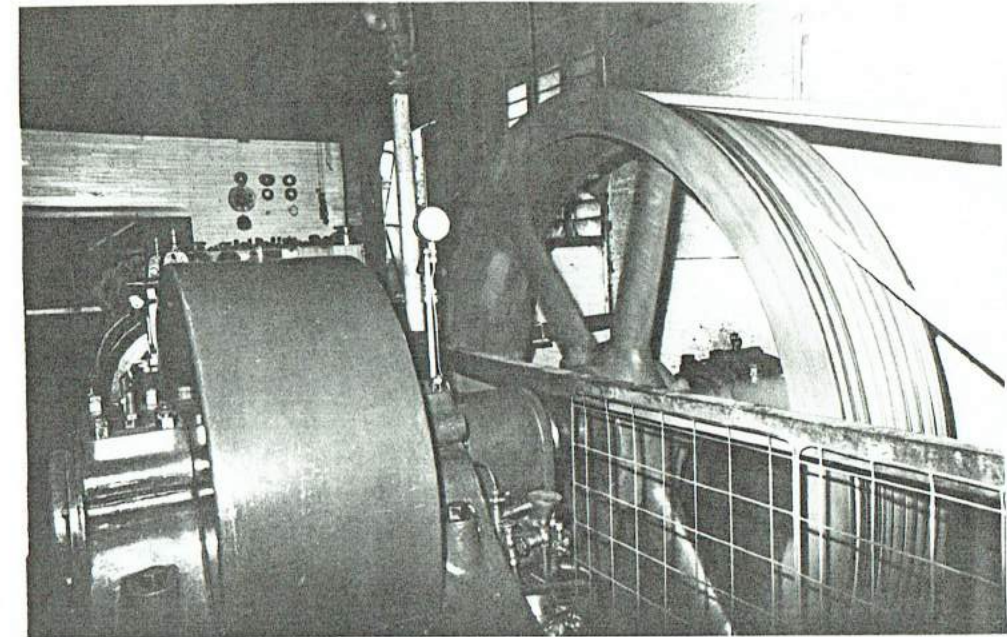
All power at the mill was generated by 3 Babcock and Wilcox steam boilers operated with saw dust and timber waste from the mill.

A fourth boiler supplied steam for the timber drying kilns.

Although two steam engines generated electrical power for the mill town the initial power to operate all mill equipment including all saws winches, log traveller carriage, powered rollers, and conveyors came from the single Robey Steam Engine. (Photo 28)



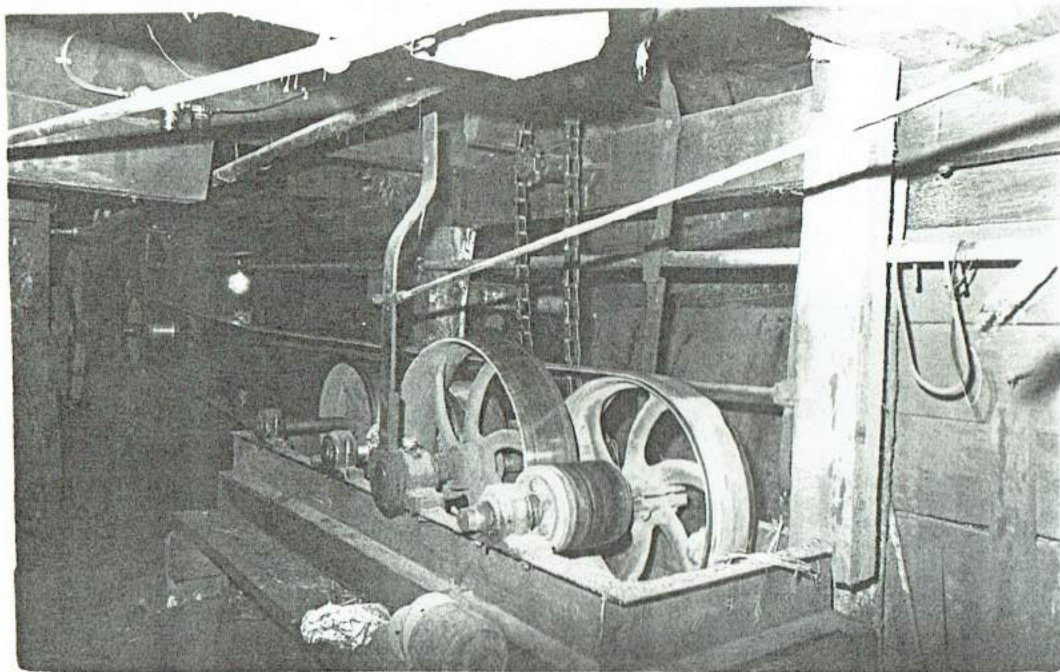
28. Robey And Bellis And Morcom Steam Engines. 1978



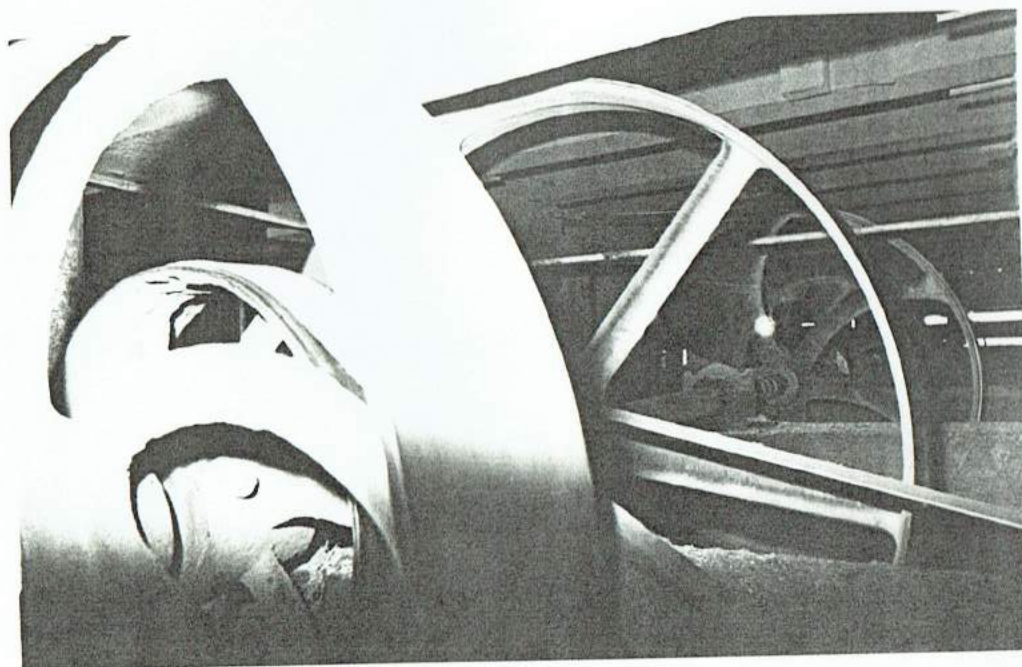
29. Robey Steam Engine Flywheel And Rope Drives. 1978

The power to all equipment was through drive shafts operating from the Robey Steam Engine Flywheel. (Photo 29)

The system of drive shafts located principally under the floor mill connecting through belt drivers to the mill equipment is a prime example of the technology required to operate a timber mill by steam power. (Photo 30, 31)



30. Section Of Drive Units Under The Mill Floor. *OPERATING 1978*



31. Drive Staff And Pulleys Under The Mill Floor. *1978*

A feature of the mill was the extent of the power assisted timber handling equipment installed and the operation of this equipment by direct drive from under the mill floor. The existing equipment provides an outstanding example of the technology required for the operation of a steam powered mill.

The under floor area of the mill is accessible and the existing equipment provides a rare example of the technology required during the steam era.

Nearly all the drive equipment remains with the exception of some of the belts and is in reasonable condition.

2.3 DISCUSSION AND COMPARISON

The timber industry was one of the first industries in the State commencing at the time of early settlement, the timber being initially pit sawn and hand hewn. (Reference 9)

There are the existing remains of pits used for pit sawing in the forest areas nearby to Perth. The nearest to Perth being possibly those in Kings Park.

As the existence of the Western Australian hardwoods became more widely known the potential for timber export to other States and overseas became more apparent and much of the early timber industry was based on export of the timber.

As the State developed and the era of agricultural railways commenced considerable cutting for rail sleepers occurred particularly in the mills nearer to Perth in the Canning and Sawyers Valley area.

The timber industry expanded throughout the State and included in Appendix 6 is a list of some of the timber mills and the dates they commenced operating in the Southwest of the State. This list is compiled from available sources (Bibliography 2, 3) and is not a complete list of all mills constructed although most of the main mills are included. In 1957 there were 212 mills operating in W.A. (Reference 10, 11)

Also included in Appendix 6 is a map indicating the approximate location of mills compiled from "Steam in the Forest" by M R H Southcombe. (Reference 7).

The widespread areas of forest timber in the South West is evident from the extent of the timber mills constructed, the industry over the years providing employment and gaining export income to the State.

In the main the timber industry has worked forest on Crown Land, the industry being mostly based on private companies although the State Saw Mills was established in 1912 and operated until 1961 when they were taken over by Hawker Siddeley Company which was merged with Bunnings in 1970. (Reference 6)

The requirement to provide timber for the building boom following the conclusion of the Second World War required the opening of additional forest areas to timber milling.

In meeting this need Bunnings Ltd commenced planning the Donnelly River Mill to work the karri forest timber permit in the area held by Bunnings.

It had been always necessary to locate timber mills within the forest areas to minimise the distance to transport the heavy logs to the mill.

Initially horse teams were used to transport the logs to the mill, however gradually rail systems starting with wooden rails were used, these to be replaced by steel rail systems and steam locomotives hauling rail rakes.

The use of steam had traditionally been the main power source available to operate timber mills and the industry depended and developed on this power source, extending out to steam locomotives.

The Donnelly River Mill although only 27 kilometres from Manjimup and 32 kilometres from Bridgetown it could only be developed by the utilisation of steam power using steam engines obtained from other areas of the State and elsewhere in Australia.

Although a rail link to the previously constructed Yornup Mill and rail head, 19 kilometres distant, was included in the construction, the transporting of logs from the bush at Donnelly was based on heavy road trucking equipment which had become available from Army sources.

Log hauling by road was a significant change to previous methods and every endeavour was also made to design and construct the Donnelly Mill utilising the latest technology and materials, however the mill was still constructed using local materials wherever possible and machinery gathered from other industrial sites.

This illustrated the low capital expenditure on which the timber industry depended, but it also indicated the ability and ingenuity of the companies and their workforce which also had to deal with equipment and material shortage as in aftermath of the Second World War.

For these reasons and although the mill was constructed in 1949 it did, with the exception of the log hauling methods, represent the basic aspects of traditional timber mill technology based on steam power.

When in 1978 it became necessary to close the mill according to the requirements of the Forests Dept to close less efficient mills, having operated for 29 years, the mill itself remained principally as originally constructed.

At the time of closure Bunnings had already upgraded Dean Mill closer to Manjimup utilising the latest technology including band saws, powered rollers and remote control operating equipment, electric power for the mill operation coming from the State Energy Commission electric grid system, logs being hauled to the mill by road transport.

When in the past a mill had closed it had always been the practise to relocate the mill equipment and steam engines to a new mill.

Due to technological changes occurring in the timber industry the equipment at the Donnelly River Mill could not be relocated to a new site, particularly as the State Energy Commission electricity supply grid was now available at mill sites.

For these reasons much of the equipment has remained in position at the mill representing the past technology of a steam powered mill on which the industry depended and located adjacent to a supply of water.

Bunnings Ltd agreed to the mill remaining principally intact, (Appendix 10). A wide range of enquiries within the West Australian timber industry indicate that there is no other complete example of the complete steam timber mill technology within the state.

In addition to the mill technology the remaining mill housing, workers club, boarding house, school and oval is indicative of the total entity required to sustain an operational mill in a forest location.

The location is picturesque and is evidence of the care and attention given in the original design to taking in all advantages of the site in regard to the mill and mill town this being further illustrated by the tourist attraction of the area.

Very few changes have been carried out at the mill during the 27 years of operation and although built in 1949 it is clearly representative of the early timber mill technology on which the timber industry developed and was dependent.

3.0 STATEMENT OF CULTURAL SIGNIFICANCE

The hardwood and forests of the South West of Western Australia have been milled for timber since the early days of European settlement the forests being the basis for the development of a strong timber industry.

Many large and small companies as well as the State Sawmills established mills, with over 200 mills operating in the early 1960's (Reference 10, 11).

Steam power was used for over 100 years in the timber industry, however with the wider distribution of electrical power over the past thirty years the use of steam as the source of mill power has ceased. although steam is used in the drying kilns.

The completeness of the Donnelly river Mill and its ability to illustrate timber mill technology based on steam power is unique and is of high significance, there being no other mill in the state demonstrating the degree to which the technology was developed (Para 2.3).

The steam boilers and engines are significant and also the technology for direct drive of all mill equipment.

The mill is of high scientific and industrial archaeological significance.

Bunnings Pty Ltd the builders of the Donnelly River Mill was formed by Robert Bunning in 1886 and developed by his sons into one of the largest timber companies in Australia. Robert, Charles and Tom Bunning have made a major contribution to industrial development in WA.

In addition to the almost completely equipped steam operated timber mill is the almost original mill town demonstrating the self contained characteristic necessary to carry out timber mill operations in isolated bush locations.

3.1 AREAS FOR FURTHER RESEARCH

This mill in its entirety is representative of a steam powered mill and the distribution of shaft and belt power throughout the mill is a significant feature.

The use of the mill equipment to handle the logs and produce the sawn timber products is in need of further recording, the information to be obtained from staff who worked the mill. The techniques are of great interest in recording the development of the timber industry.

However further research could be carried out in respect to the particular items of steam equipment.

This would include the Robey and the Bellis and Morcom steam engines, the Babcock and Wilcox boilers, and also the steam winch controlling logs entering the mill which could possibly have come from the whaling industry.

Further research could also be undertaken in connection with the use of heavy road transport to transport logs to the mill as it is possible the forest operations at Donnelly could have pioneered the introduction of this method of cartage to the State.

Further research could be carried out in connection with the introduction of transportable mechanical saws for timber felling.

Further documentation concerning the destination of timber from the mill and its use could be further studied.

PART II THE CONSERVATION POLICY

4.0 CONSTRAINTS AND OPPORTUNITIES

The mill was constructed on Crown land under the control of the then Forests Department. It was agreed at the time of the mill closure that Bunnings Ltd would leave the mill and equipment on site to fulfil a historical function ~~on the understanding that if this function was not fulfilled the equipment could be removed by the company.~~ (Bunnings Pty Ltd letter, Appendix 10).

The Crown Reserve 37707 within which the mill is located has since been vested in the Western Australian Tourism Commission and leased to Briefcase Holdings the manager of the Donnelly River Holiday Village for a period of 50 years.

4.1 INHERENT CONSTRAINTS

The lease agreement for the mill site requires the lessee to carry out maintenance and allows the Donnelly River Holiday Village to utilise it as a point of interest for tourists.

Bunnings Pty Ltd reserves the right to remove ~~mill equipment~~ and the steam engines if the mill is not conserved.

It is evident that if the cultural significance of the mill is to be retained that both preservation and restoration work is required.

It is also evident that the lessee will not have the resource to carry out the work required to achieve the full cultural significance potential to the mill.

The cultural significance is related to the entire remaining fabric of the mill.

The responsibilities of the lessee and owner need to be defined in order for further resources to be allocated, with perhaps the land on which the mill is located being excised from the lease agreement with Briefcase Holdings Pty Ltd.

4.2 USER REQUIREMENTS

The reserve on which the mill is located is vested in the Minister for Tourism.

The Minister from the Tourism Commission agrees with the potential of the site for tourism and has supplied some funding for the preservation of the mill.

The location is within the state forest. The general area is of importance to the current operating timber industry and is also popular to tourists, the access to the mill being along bitumen roads connecting to the towns of Nannup, Bridgetown and Manjimup.

Soon after closure the then Department of Tourism prepared a report on the future utilisation of the site and this is included in Appendix 11. Its use for tourism was reported in the Warren & Blackwood Times and the West Australian newspaper (Appendix 13). Briefcase Holdings leased the mill and townsite as reported in the Warren & Blackwood Times in July 1981 (Appendix 14).

The cultural significance relates to the industrial archaeology value of the mill in the development of the timber industry.

The mill will not in the future be required as an operating mill and its use is centred on displaying its industrial archaeological significance, its focus for tourist interest, and to fulfil an educational role illustrating the development of timber technology.

In order to fulfil these functions it is necessary to carry out the necessary conservation.

Briefcase Holdings the lessee of the townsite and mill ^{site} agrees to the mill ^{site} being removed from the lease and placed under the control of a separate management group. This is considered necessary of funding from other sources is to be made available to conserve the mill.

4.3 INTERPRETATIVE REQUIREMENTS

The location of the mill in the centre of the forest provides the basis for interpretation.

The mill is the significant technological feature displaying all aspects of a steam driven mill representative of development of the industry over a 100 year period.

The existence of the nearby mill town facilities also illustrates the social aspects of a remote forest timber mill and assists with the interpretation of this aspect and the retention of the housing is necessary in order to achieve complete interpretation.

To achieve adequate interpretation a photographic display of the mill whilst in operation is necessary. This display should also include details of the kiln and mill yard during operation.

At each saw bench location further description is required on its function in producing the final timber products.

The establishment of designated public viewing facilities in addition to those existing is necessary.

It is also possible to position examples of the sawn timber to illustrate each phase of the mill process. This method is to some extent being used at present.

Although the steam boilers remain in position their condition is such that it is not considered feasible to utilise them to produce steam.

It is possible to install a modern air compressor to generate compressed air to turn the two remaining steam engines. This could, with further preservation, enable the shafts and pulleys beneath the floor and the above floor equipment to operate.

This would assist with the interpretation of the technology, and provide an educational role in the development of the technology.

4.4 NON-HERITAGE STATUTORY REQUIREMENTS

The mill was designed as an operating sawmill 45 years ago and all structures were robustly designed and constructed in order to handle the large diameter karri logs being processed by the mill.

All roof and floor supporting structures are in reasonable condition, and it is anticipated that on detailed assessment will meet structural building requirements. Some repair work is required as listed in Section 5.

The areas open to public viewing will need to be assessed according to the appropriate codes and regulations, and together with machinery which is to operate on display basis will need to meet the requirements of the Department of Occupational Health & Safety and Welfare.

Water is distributed around the site with installed fire hydrants, and these will need to be assessed and equipped with fire hoses to regulation standards.

Toilets at the site will also be required to comply with Health Department requirements.

4.5 OTHER RESTRAINTS

In developing the Conservation Policy there are a number of major factors to be considered.

4.5.1 Cultural Significance

The completeness of the mill and its ability to demonstrate the early timber mill technology based on steam power is significant and indicates preservation and restoration of the mill structures and equipment to be followed rather than adaption.

4.5.2 Physical Condition

Although preservation and restoration is required the physical condition of the structures and equipment provides a satisfactory basis on which to retain the mill. This is outlined in detail in Section 5.3.

4.5.3 Location

The mill is well served by connecting roads to the relatively nearby towns of Nannup, Bridgetown, and Manjimup, however it is surrounded by State Forest with the mill town (Holiday Village) providing facility to further focus attention on the mill. The mill town is under Deed of Lease to Briefcase Holdings to be operated for tourism during the period of the lease. Reference 16 outlines the conditions.

With the exception of the sorting table the principal mill structures and equipment are not included in the Deed of Lease to Briefcase Holdings although the land on which they are located, Reserve 3707 is leased to them.

Discussion with Mr Ray Moss of Briefcase Holdings Pty Ltd has indicated that the company would be in agreement to the mill site land being excised from the lease.

The site encompassing the mill should also include the sorting shed, and this structure should be transferred out of the control of the Donnelly Holiday Village (Briefcase Holdings Pty Ltd). The kiln area should also be included in the future mill site.

4.6 FUTURE OPPORTUNITIES

The conservation of the mill provides a unique opportunity to display early timber mill technology at its original location in the centre of forest country.

In addition to being a significant example of industrial archaeology the public interest in the area enables the mill to be also a focus for tourist activity and also fulfil an important educational role illustrating the development of timber mill technology in the era of steam power.

The entire fabric of the mill and equipment performs this function.

The nearby mill town facilities further interprets the social relationship within a community dependent for employment on the timber industry.

The area could also possibly be a focus of a specialist industry manufacturing timber products.

5.0 CONSERVATION POLICY STATEMENT

The cultural significance of the mill indicates the necessity to retain and preserve the fabric of all structures and equipment and should be included in the West Australian Heritage Register and the Register of the National Estate.

The location of the mill central to the forest from which the timber for the mill was obtained and adjacent to the original mill town is also significant.

The presentation of the mill provides for its utilisation as a unique example of timber industrial archaeology providing a focal point for tourism and the utilisation of the original mill town as a holiday village.

The completeness of the original facilities makes the interpretation of the place "self evident". although additional displays at the mill would assist in explaining the technology and history of the place.

The management of the site could be through a local group formed with representation from each of the Shires of Manjimup, Bridgetown and Greenbushes, and Nannup within whose boundaries the mill is located, with daily management by the Donnelly Holiday Village.

Control of the fabric should be under set guidelines with all conservation work under the supervision of an experienced heritage technologist.

Future developments could include the establishment of specialist timber activities outside the mill site landed in the previous mill guard area.

No adaption processes of the mill fabric should occur with the exception of perhaps compressed air to drive particular components of equipment.

The program of preservation should be reviewed every two years to assess that the objectives are being achieved.

5.1 HERITAGE LISTINGS

The National Trust advise that the mill is not listed on their register, and it is also not included on the Register under the Western Australian Heritage Act.

The mill is located within the Shire of Nannup and is not currently listed by the Shire as a heritage place.

5.2 CONSERVATION PROCEDURES

The mill and its equipment remain in a reasonable state of preservation due to the roofing being maintained and this policy should be continued and extended to the supporting structures where some reconstruction is necessary.

Much of the mill equipment material is steel and requires maintenance to achieve the policy of preservation of the fabric.

Some reconstruction is required to ensure structural adequacy of the mill buildings and also for the equipment where deficiencies and missing items need to be replaced.

5.3 POLICY RECOMMENDATIONS

Although an outline of the principal mill fabric is included in section 2 of this report a more comprehensive outline of the physical condition is included in this section.

5.3.1 Buildings and Mill Structures

The key to the conservation of the mill is the maintenance of the structures supporting the several roofs which provide the functions of protecting the mill equipment.

The structural fabric of the buildings is timber throughout and it is necessary it maintain the timber in a dry condition to ensure its preservation.

Deterioration appears to only have occurred where the roofing is not adequate to keep ~~at~~ the weather.

5.3.1.1 Fire Hydrants

Being of timber construction an adequate fire service is necessary to achieve preservation.

Fire hydrants are installed throughout the mill as indicated on the plan in Appendix 2.

Water is available at these sprinklers however fire hoses need to be positioned at each one and the condition of the connecting pipework assessed.

Overhead sprinklers are installed throughout the mill both at underside of roof level and beneath the mill floor.

The connecting pipework is of galvanised iron and should be assessed for effectiveness and replaced where necessary.

The water supply distribution system and tanks are under the control of the Donnelly Holiday Village and this should be assessed together with Briefcase Holdings Pty Ltd and upgraded where necessary.

5.3.1.2 Drainage

Owing to the use of timber throughout the building structures it is necessary to maintain dry conditions around the timber columns where they enter the ground.

This requires the restoration of the ground drainage system and the roof downpipe drainage controlled.

The comprehensive cut off drainage system for overland flow on the south side of the mill on the townsite side needs to be reconstructed. This system also collects the mill roof run-off.

Under the mill floor there is also a drainage collection system needing reconstruction, and on the down hill or northern side of the mill the drainage system requires reconstruction to ensure that the roof drainage is diverted towards the Donnelly River.

5.3.1.3 Main Mill Building

This building contains all the saws and mill operating equipment including the shaft, pulley and belt system below the floor. (Photo 5)

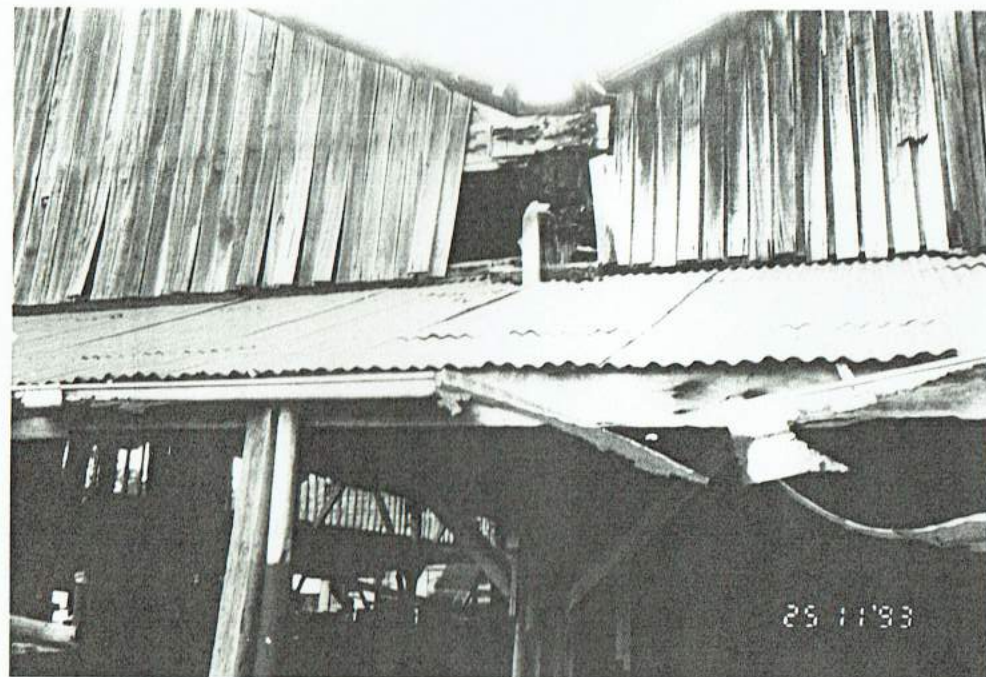
The roofing is in reasonable condition with one sheet of iron missing. Sections of the roof sheeting will need replacement in the next 4 to 5 years.

The timber roof support trusses are in reasonable condition together with the support columns and timber flooring. (Photo 8)

Some flooring will need to be assessed for replacement.

The only area of obvious deterioration is the central column and corbel top at the west end of the building where the roof box gutter has deteriorated and the roof water is discharging directly onto the timber column. (Photo 32)

Fungicide treatment to the floor & roof columns should be carried out at ground level.



32. Timber Deterioration On Central Column At West End Of Main Mill Building. 1993

5.3.1.4 Electric Power

Electric power is available at the mill, however further lighting is required through the buildings and under the mill floor.

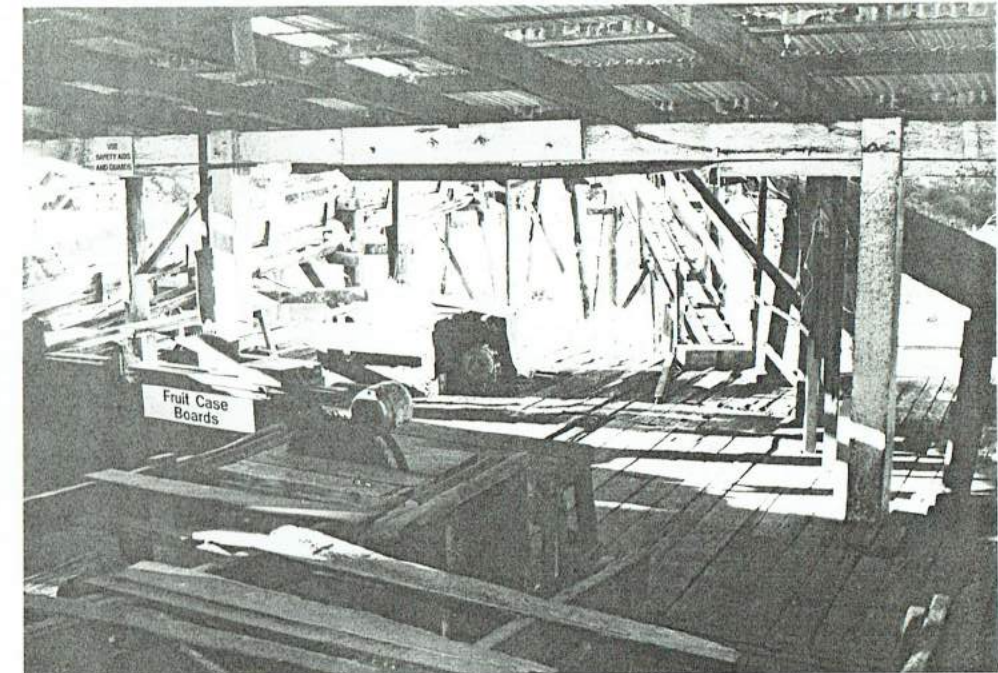
5.3.1.5 Main Mill Building Annex

Verandah type roofs are located on the west and south side of the main mill building and require reconstruction. (Photo 33, 34)

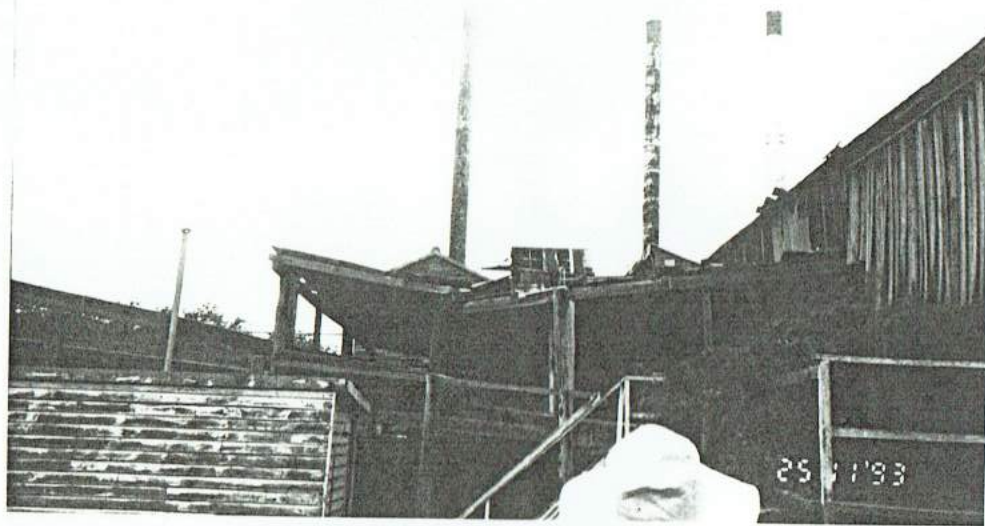
This particularly applies to the roofing over the fruit packing case production area.

In this section the roof rain runoff is discharging onto the flooring which has severely deteriorated.

The roof needs maintenance and the flooring is unsafe and requires reconstruction.



EXISTING
33. Fruit Packing Case Area. 1994



34. ^{EXISTING} Annex Area. (FRUIT (ASC) 1993

5.3.1.6 Site Security

The mill structures are surrounded by a 1,800mm high chain wire security fence. This needs to be upgraded particularly at the eastern end where it is open.

5.3.1.7 Steam Engine Building

This building is of timber construction and attached to but structurally separate from the main mill building. (Photo 5)

The roofing iron has been replaced in recent years and is in reasonable condition. The Robey and Bellis and Morcom steam engines are on concrete footings surrounded by a concrete floor.

The sliding door and entry steps on the southern side of the building require reconstruction.

5.3.1.8 Boiler Room

Two of the Babcock and Wilcox steam boilers supplying the steam engines are under the one truss roof adjacent to the building housing the steam engines. (Photo 5, 10).

Some of the roofing iron has been replaced in recent years and the remainder will need to be replaced in the next few years.

Door openings at the eastern end of the building require closing and timber wall cladding needs reconstruction in some sections.

The third Babcock and Wilcox boiler supplying steam to the steam engines is under a sloping roof (Photo 5) adjacent to the other boiler building and the roof iron has been nearly all renewed.

5.3.1.9 Kiln Steam Boiler Building

The drying kilns were constructed after the mill was first in operation.

The boiler to provide steam for the kilns is separated from the three steam engine boilers and housed in a separate building (Photo 5, 10).

The roof sheeting which is of asbestos needs to be replaced and timber wall cladding repaired.

5.3.1.10 Log Winch Building

This small building protects a steam operated winch used to unload logs and roll them onto the log trolley leading to the travelling log carriage. (Photo 14)

This building needs to be reconstructed to conserve this unique winch equipment.

5.3.1.11 Pre Cut Building

This building is currently used as a storeroom and holds no equipment.

However timber recladding of some sections is required and the roof assessed. Some roof sheeting has been replaced. (Photo 10)

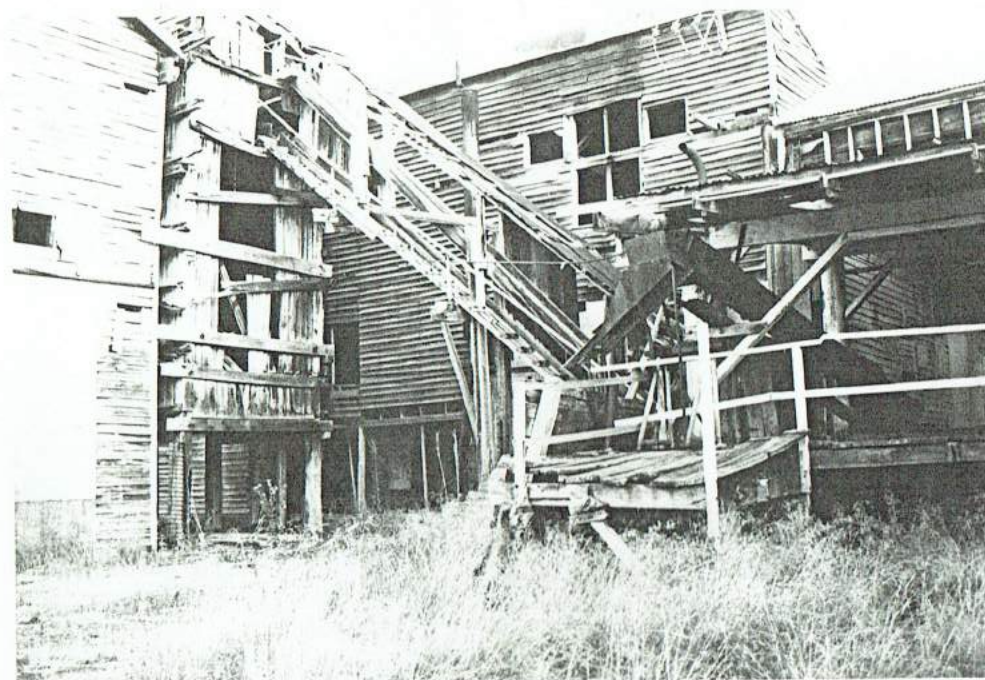
The rollers for handling timber outside the building have been removed.

5.3.1.12 Sawdust Hopper

Although not a building it is timber structure with a roof containing stored saw dust.

This hopper has deteriorated but illustrates the key component of the mill in utilising sawdust collected on conveyors under the mill floor for collection into the sawdust hopper for feeding to the boiler as a fuel.

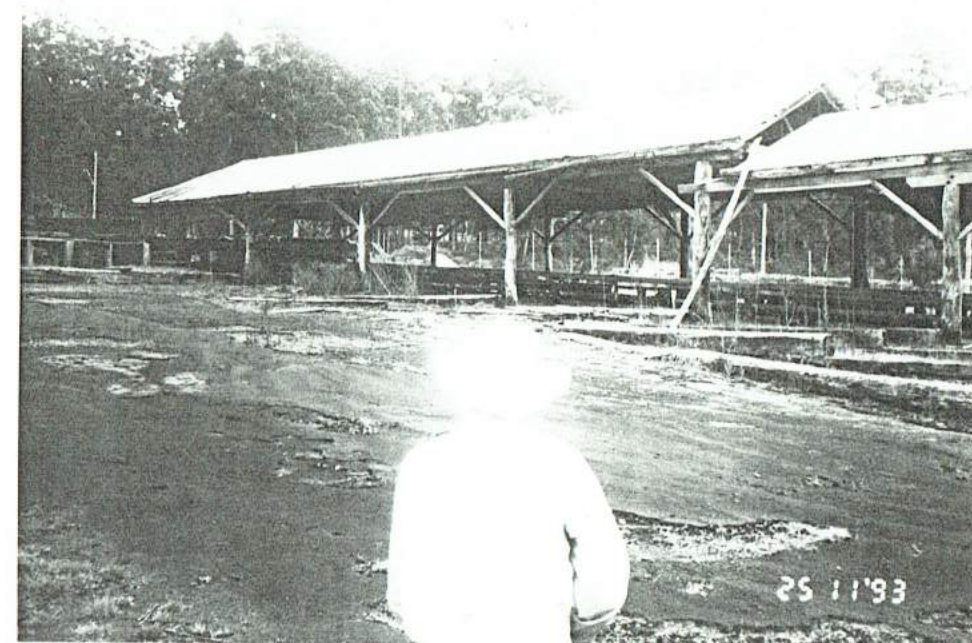
The building needs to be assessed in regard to its potential for restoration. (Photo 35)



EXISTING
35. Sawdust Hopper And Supply Conveyor. 1994

5.3.1.13 Sorting Shed

This structure is entirely of timber construction and protects the moving cable equipment installed on the sorting table. (Photo 36)

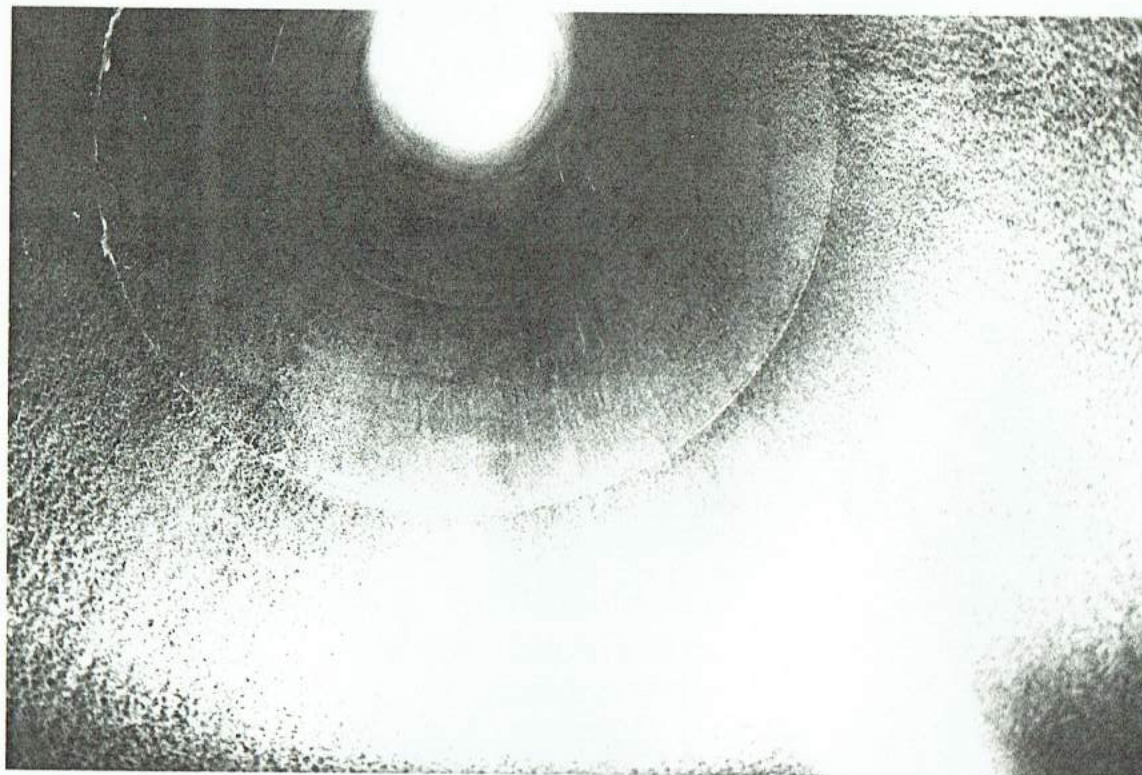


EXISTING
36. Sorting Shed Roof Structure. 1993

This structure is in reasonable condition however the roofing iron needs to be assessed to achieve preservation.

5.3.1.14 Chimney Stacks

There are three 30 metre high steel chimney stacks providing draft for the four boilers. (Photo 10)



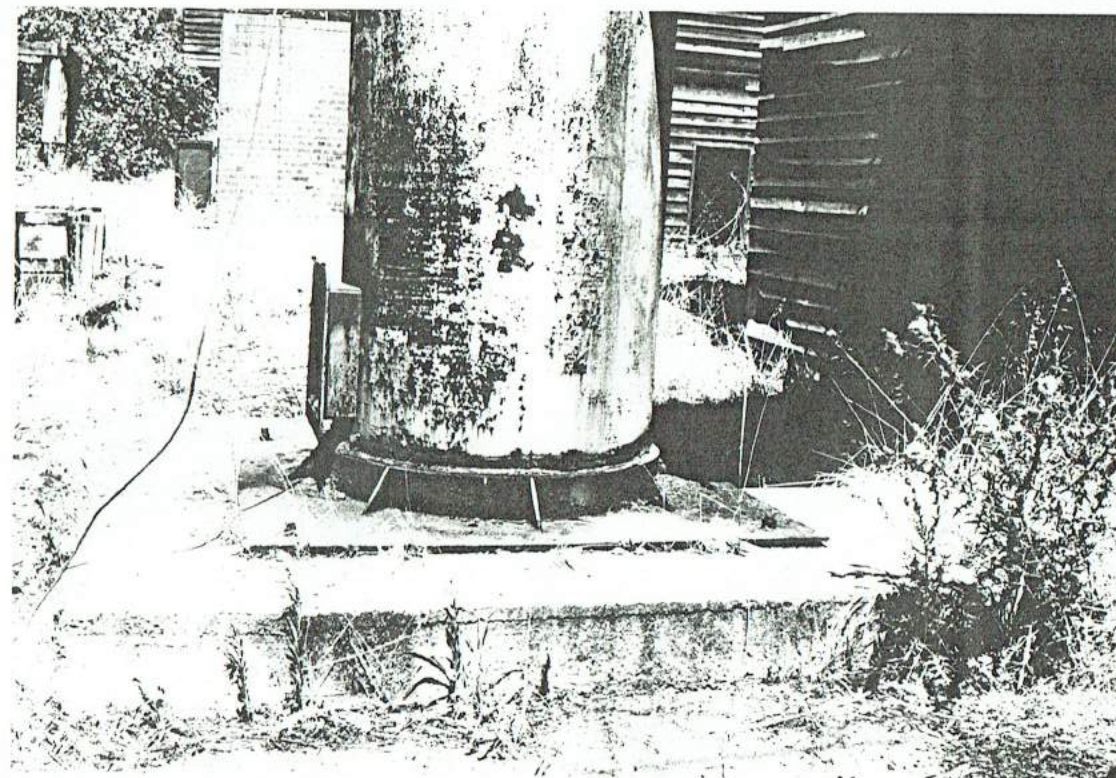
37. Inside Of One Of The Steel Chimney Stacks.

There is a separate chimney for the kiln boiler and one of the steam engine boilers. The two southern boilers are connected to the one chimney stack. There is a 16-3-49 date moulded into the foundation of this chimney.

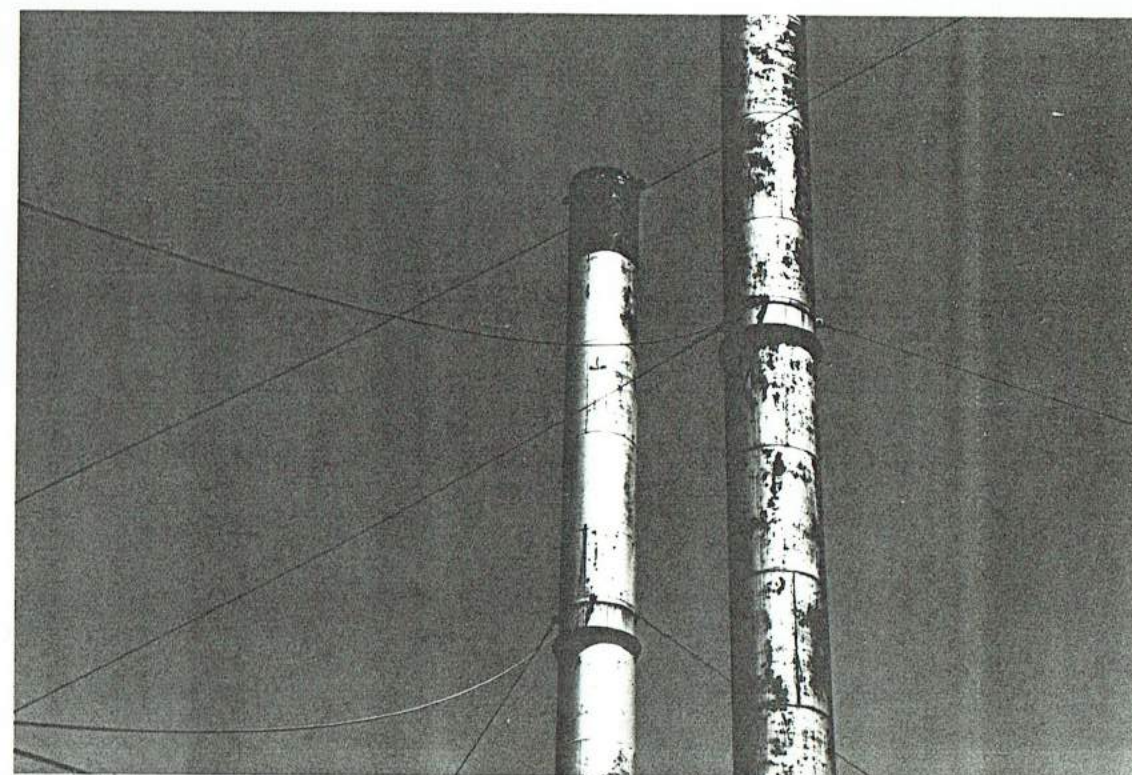
There is also a smaller chimney at the south east corner of the boiler building for exhaust steam from the steam engines. (Photo 10)

The three chimneys are constructed from rolled steel welded plate 1.75 metres outside diameter, the two steam engine boiler chimneys are fabricated from 7mm plate and the kiln chimney from 10mm plate.

The structural adequacy of the chimneys need to be further assessed. There is evidence of corrosion on the inside of the chimneys at the bottom 1 metre height from the base and it will be necessary to weld further plate on the outside to reinforce this section together with a strengthening of the steel flange at foundation level. (Photo 38)



38. Base Of One Of The Chimneys.

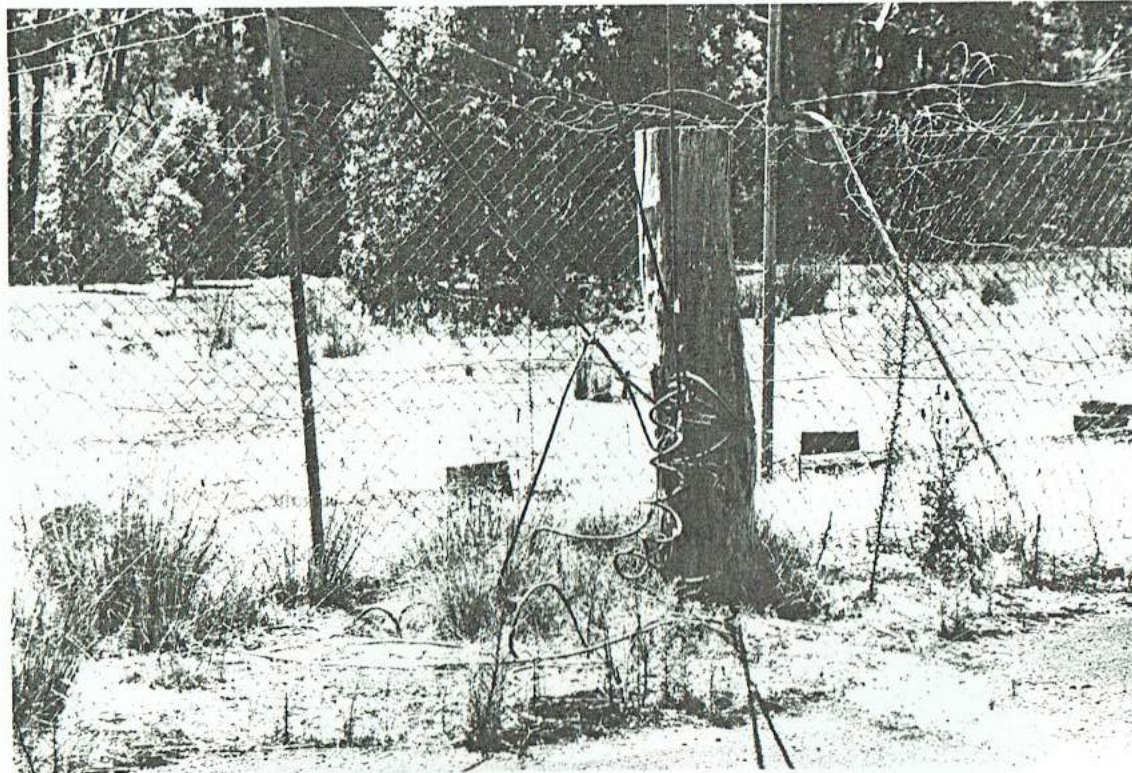


39. Chimney Wire Rope Stays.

The stability of the chimneys is provided by steel wire ropes anchored to timber posts at ground level. (Photo 39, 40)

The steel wire ropes and the ground anchors need to be structural checked.

The chimneys need to be checked and painted and this can be carried out by experienced steeple jacks who are available.

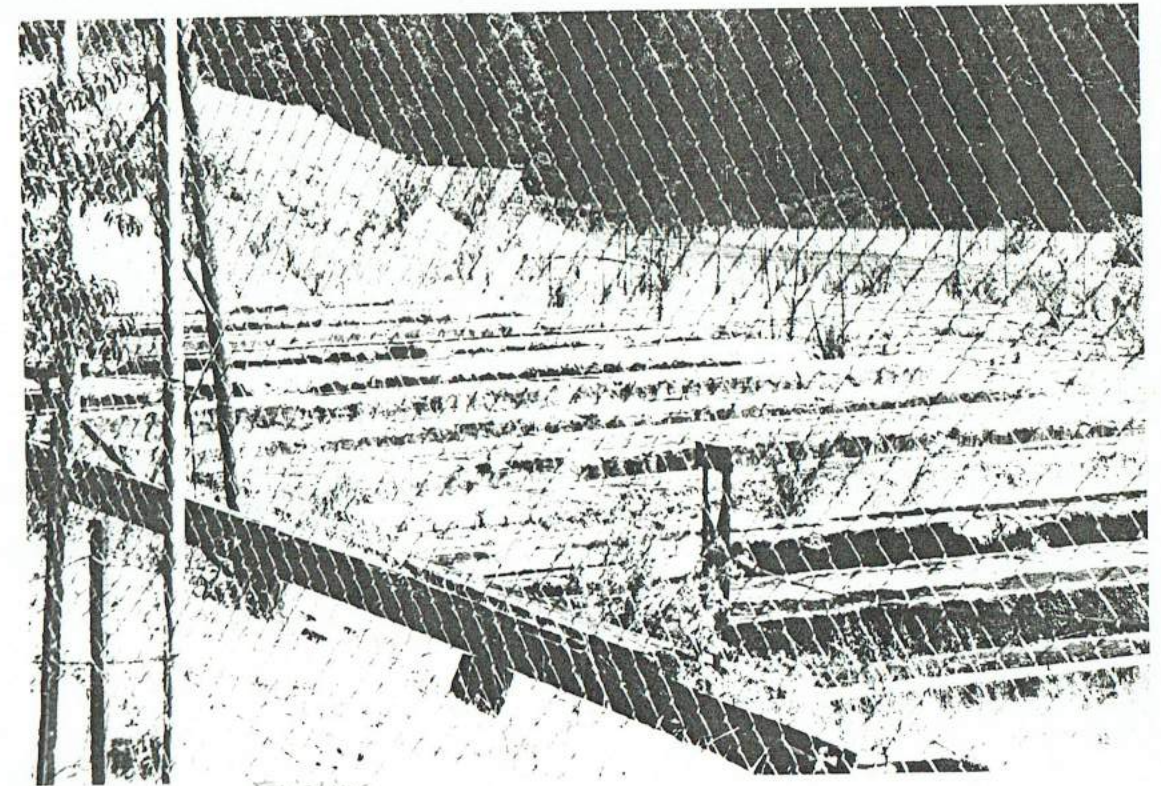


40. Existing Chimney Stay Wire Anchor Posts. 1994

Two vehicle ramps adjacent to the chimneys were used for positioning log hauling trucks for steam cleaning, these remain.

5.3.1.15 Drying Kilns

The Babcock and Wilcox boiler supplying steam to the kilns remains and also the concrete foundations of the kilns. (Photo 41)



41. Existing Photo Of Kiln Foundation. 1994

The three kiln buildings have been removed however included in Appendix 7 is Plan 1230 indicating the details of the kiln building.

In presenting the conserved mill the kiln foundations occupy a relatively small area, and it is proposed that these should remain to provide as complete as possible interpretation. This area should be included in the future mill site.

5.3.1.16 Planer Building

This building has been removed together with the equipment which at the time of the mill closure was reusable.

The location of the planer building is indicated on plan 10531 in Appendix 2.

The area is completely cleared and provides an area for the establishment of timber related activities in the future, perhaps of a specialist craft type nature.

5.3.1.17 Saw Sharpening Building

The saw sharpening building is attached to the south west corner of the main mill building and is in good condition. Most of the saw sharpening equipment has been removed.

The building also houses the electrical switchboard equipment for the electric lighting.

This building illustrates an important requirement for the operation of the mill and it is recommended that the building be retained and some of the equipment replaced.

The building is secure and can also be utilised for interpretive information on the mill operation.

It may also be feasible to recreate the original mill model to assist with interpretation for inclusion in this building.

5.3.1.18 Toilets

A male and female toilet facility is housed in a building adjacent to the saw sharpening building. (Photo 5)

This building is in reasonable condition with water available to the toilets.

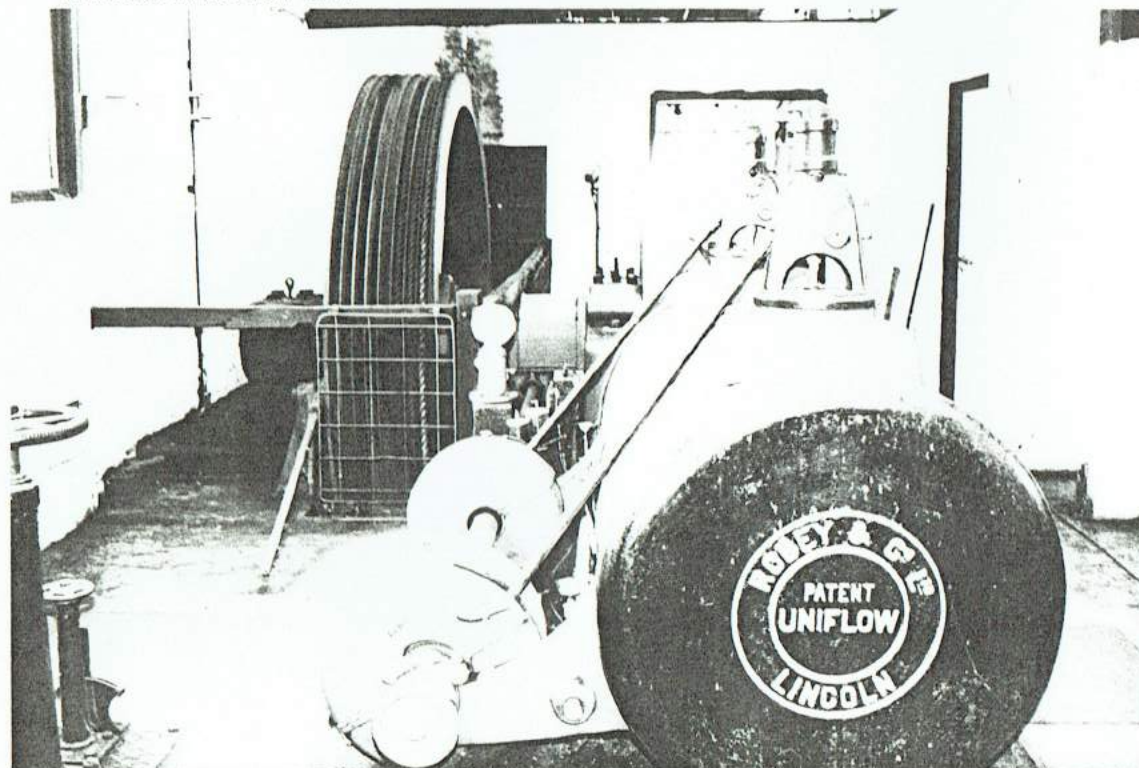
It is recommended that this facility remain and the toilets upgraded for use by personnel associated with management of the mill and possible utilisation by tourist groups.

5.3.2 Equipment

The condition of equipment is listed as follows:

5.3.2.1 Robey Steam Engine

The Robey steam engine is still in position and fully equipped. The technical details are included in section 2.1.



42. Recent Photos Of Robey Steam Engine. 1994

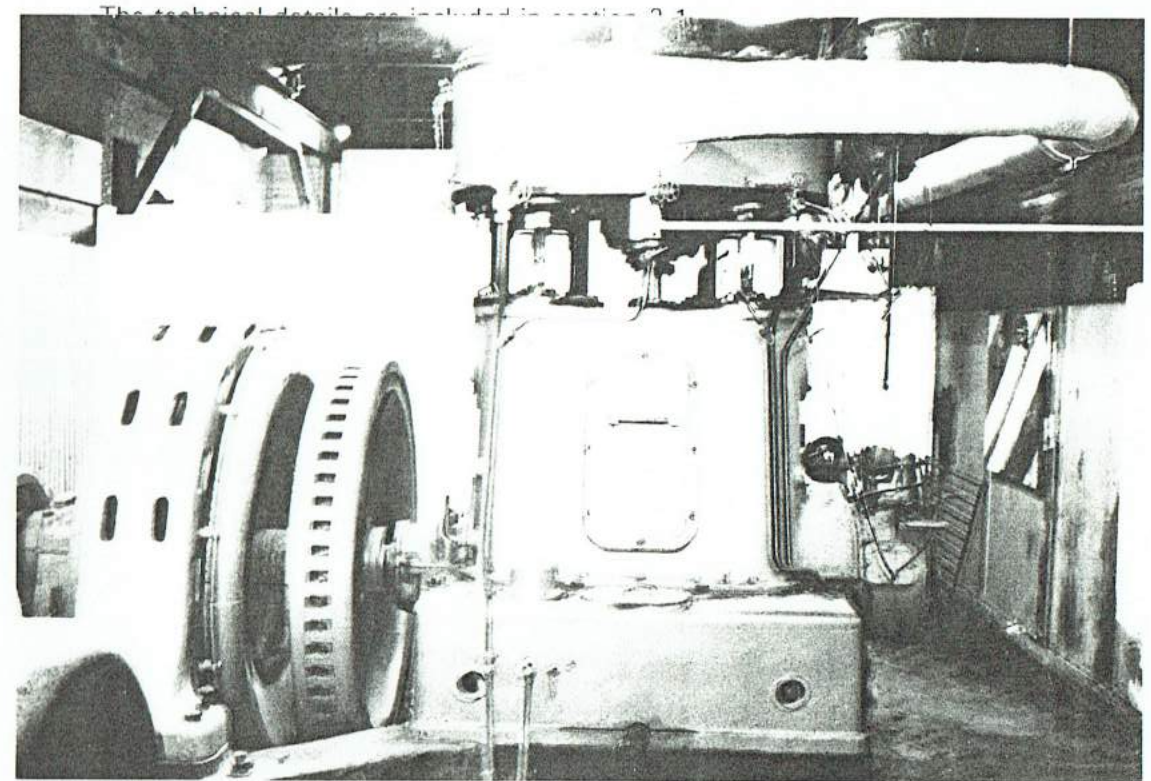
The engine is in good condition from outside appearance, however it has not been turned over for many years.

This engine is worthy of close attention to free moving parts and if possible treat to limit corrosion. This work should be carried out by an experienced steam fitter.

An air compressor could be installed to enable the engine to be turned with compress air.

5.3.2.2 Bellis and Morcom Steam Engine

This steam engine and alternator is still in position and in good outward condition.



43. Recent Photo Of The Bellis Morcom Steam Engine. 1994

This engine and alternator is deserving of specialist attention as outlined for the Robey steam engine.

5.3.2.3 Steam Water Pump

The water supply direct into the Babcock and Wilcox boilers was pumped by two vertical mounted steam pumps located inside the timber building adjacent to the southern side of the southern boiler.

One of these pumps is still in position and is one of the items which should receive fitter attention to restrict corrosion.

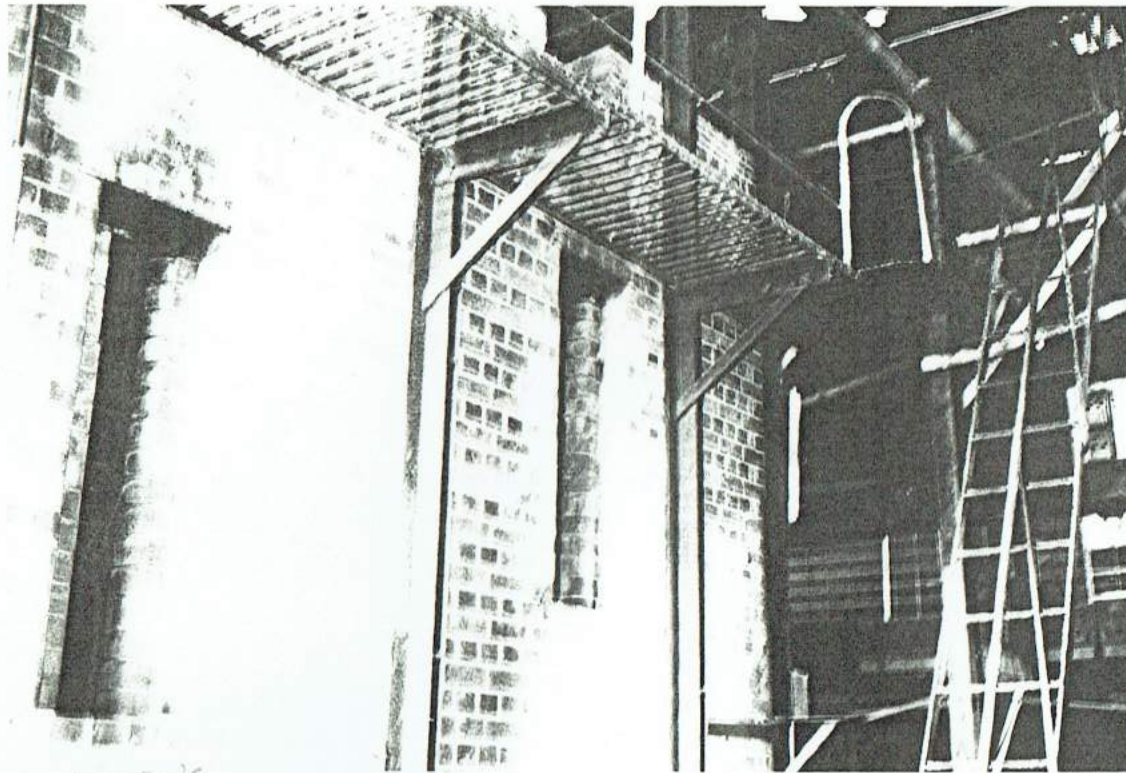
This pump also is a relatively small item and the fact that one of the pumps has been removed provides possible evidence that the smaller items can be removed if proper security is not provided.

There is some evidence in other sections of the mill of smaller items having been removed, possibly without authorisation.

5.3.2.4 Steam Boilers

The four Babcock and Wilcox steam boilers remain in position protected from the weather in existing buildings.

Although there is evidence of corrosion and the boilers would need extensive reconstruction to meet the safety requirements for refiring and steam production, this is not recommended.



EXISTING
44. Steam Boiler, Brickwork, Access Landings. 1994

The brickwork and boiler support structures are in good condition and together with the boiler equipment illustrates the steam production required to provide power for the mill.

The access ways and landings need to be assessed for safety and some corrosion protection and replacement of steel decking is required.

To preserve the boiler steel suitable corrosion protection is necessary.

Public access is only recommended for those ladders and landings meeting the necessary safety requirements.

A feature of the boiler is the use of sawdust as well as timber as a fuel.

A unique feature of the mill is the collection of sawdust from the saw benches and twin saws into the sawdust storage hopper and the conveyor distribution to the boiler.

It is recommended that this system be preserved including the boilers.

5.3.2.5 Log Landings

Logs being delivered to the mill (Photo 18) were unloaded onto landings on the southern side of the rail track adjacent to the southern side of the mill.

There was a log landing and a ^{peeler} ~~peeler~~ landing shown on the plan in Appendix 3, the peeler landing being utilised to remove bark from the logs.

There is little evidence of these landings, however the boundary of the mill site should include some of the landing area to enable some reconstruction of the landing to achieve interpretation.

5.3.2.6 Log Handling Steam Winch

This steam winch is in position (Photo 14) and it is understood to have been originally used on a whale chaser to recover the whale carcass.

The winch is housed in a separate building, its purpose being to unload logs from the log hauling trucks onto the storage landing and move logs from the landing onto the log trolley for movement of the logs into the storage area under the mill roof from which logs were moved onto the travelling carriage feeding the twin saws.

This winch is rare and it is recommended that this winch receive specialist fitter attention and corrosion protection to achieve preservation.

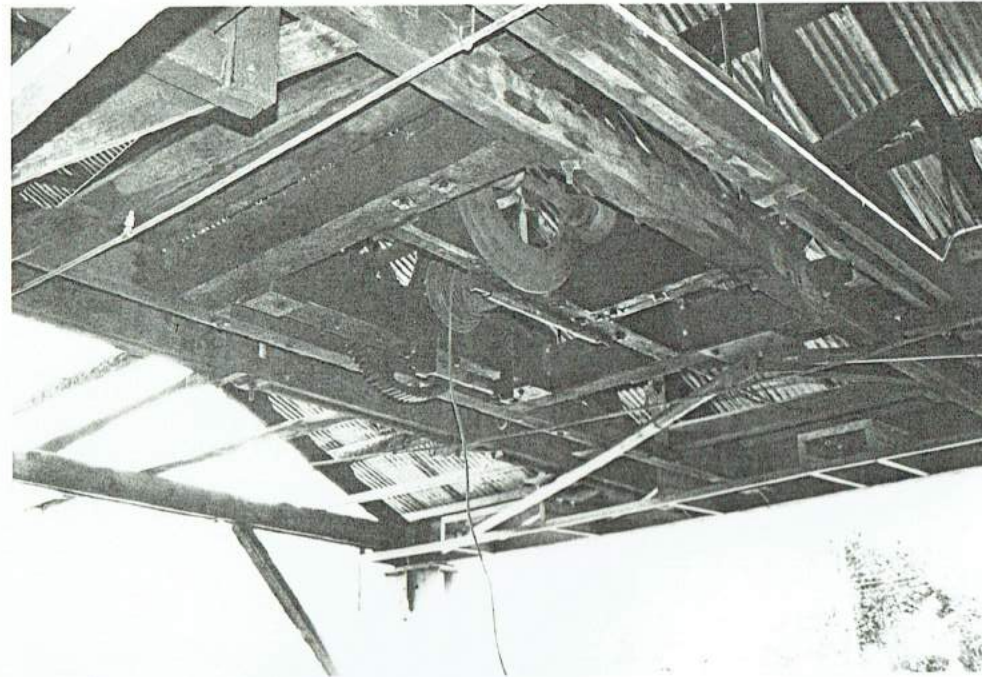
5.3.2.7 Log Trolley

(Photo 19)
The log trolley running on two rails enables logs to be transferred from the storage landing (loaded onto the trolley by the log winch) and offloaded onto the storage landing by the overhead winch prior to reloading onto the traveller log carriage.

This log trolley remains in position as shown in Photo 19 and should be preserved to demonstrate the method of log handling.

5.3.2.8 Overhead Winch

(Photo 45)
This overhead winch is belt driven from the main drive and should be preserved to illustrate the technology and method of log handling on the storage skids for entry into the mill. *The winch was used to remove logs from the log trolley onto the storage skids and then load these logs onto the traveller carriage.*



EXISTING
45. Overhead Log Handling Winch. 1994

The winch remains in position and is in reasonable condition and should receive fitter attention and corrosion control. This is recommended for preservation.

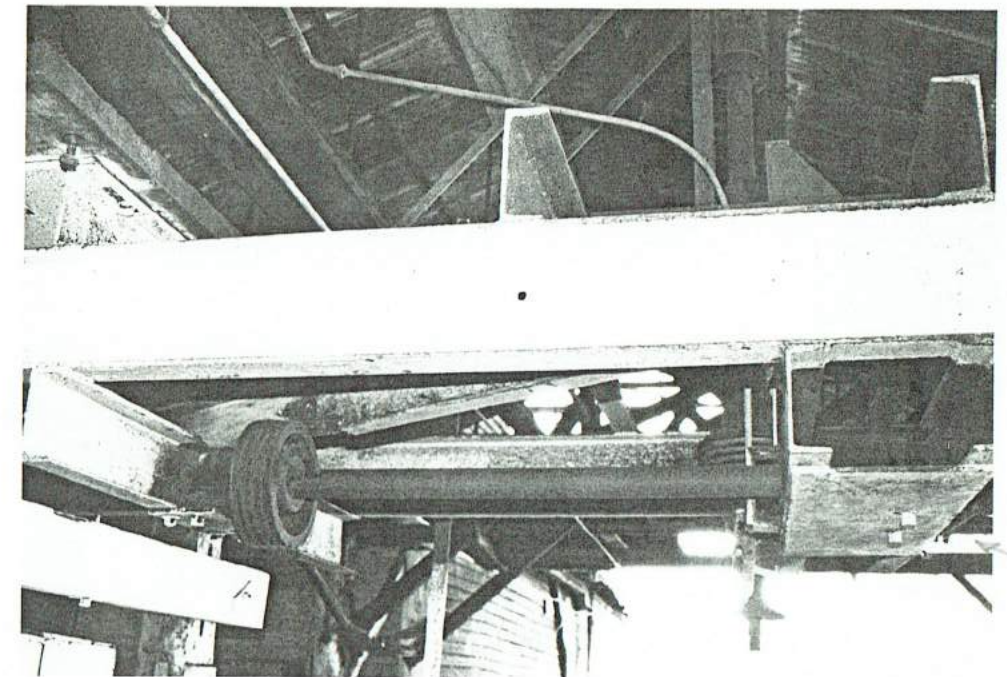
5.3.2.9 Overhead Saws

The function of the two overhead saws was to reduce the diameter of the large diameter logs to enable them to be handled by the twin saws by cutting a wedge shaped flitch from the top of the log. This is described in section 2.2.4.1.

The mechanism of the vertical and horizontal overhead saws remains although the actual saws have been removed. In photograph 46 can be seen the spindle for the horizontal saw and in the extreme right hand side of the photograph the spindle for the vertical saw.

Presentation of this equipment is recommended.

Preservation



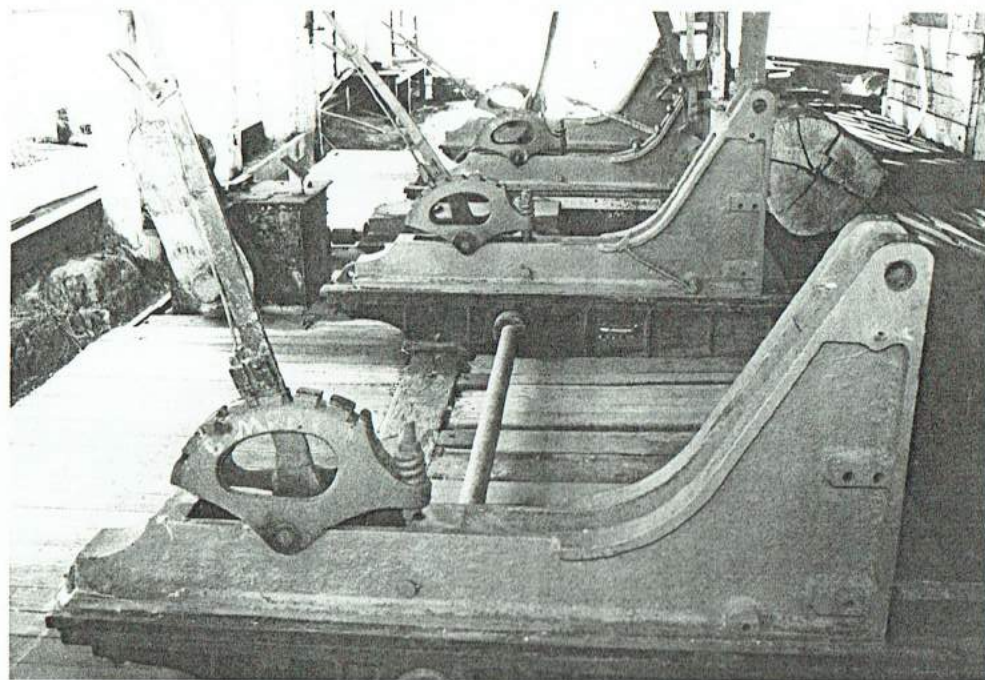
EXISTING
46. Overhead Saws. MECHANISM.

This process is important to interpret the means of handling the larger sized Karri logs similar to the Queen Elizabeth Tree.

It is recommended that the mechanism receive fitter tradesman attention to prevent corrosion and that the two saws be reinstated onto the spindles.

5.3.2.10 Traveller Log Carriage

The log carriage remains in an almost complete condition as shown in Photo 47 below and also photo 20.



47. Existing Log Carriage. 1994

Photo 20 shows the logs on the storage landing skids and a log being positioned on the traveller carriage and the dog spikes for holding the log.

Photo 47 shows the four frames on the carriage and the motor drive and drive shaft used for positioning and holding the logs.

As indicated the carriage was used to move the log through the overhead saws and the twin saws.

The carriage is under the main mill roof and protected from the weather, however in the future the moving parts should be greased for preservation.

5.3.2.11 Traveller Log Carriage Winch

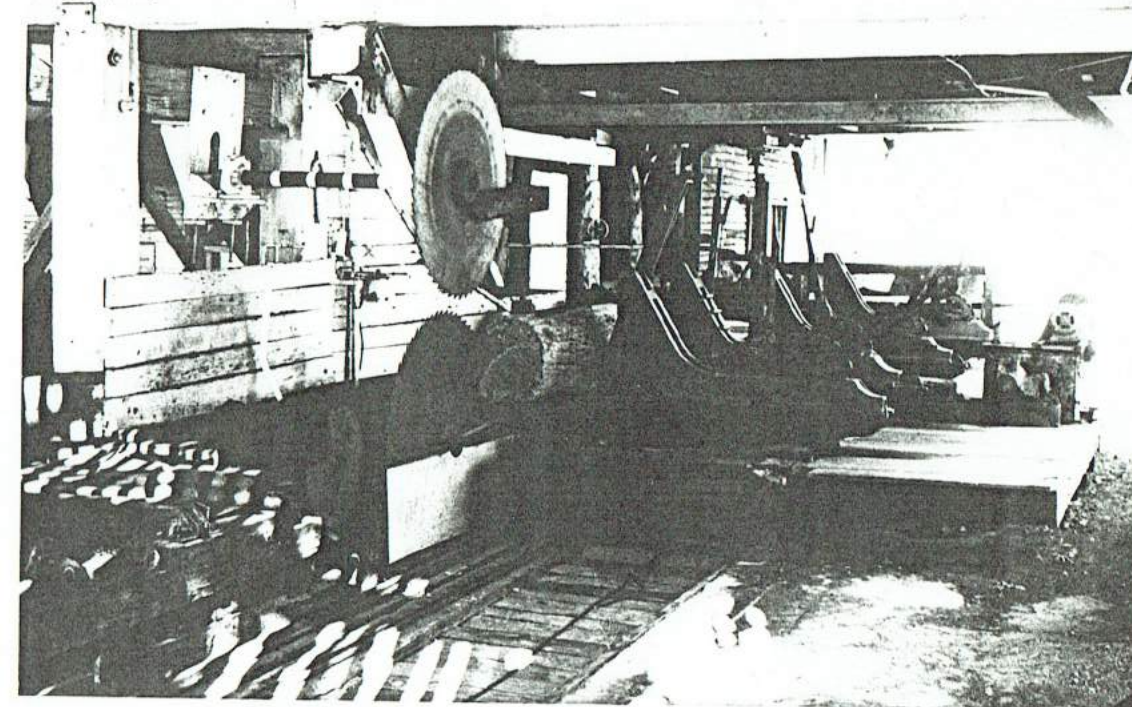
The movement of the traveller carriage along the rails is controlled into the forward and reverse direction by the operation of a turbine steam winch operating a cable drum with the cable attached to the carriage and passing through pulley sheaves enclosed between the rails at the extremities of the carriage movement rails.

The steam turbine, the cable and steam control valve remains.

All this equipment is below rail and floor level of the mill and needs preservation.

5.3.2.12 Twin Saws

These saws remain in position together with the drive shafts and should be preserved.



48. Existing Twin Saws. 1994

It is significant and these saws move in an opposite direction of rotation with the bottom saw moving in the opposite direction from all the saws in the mill.

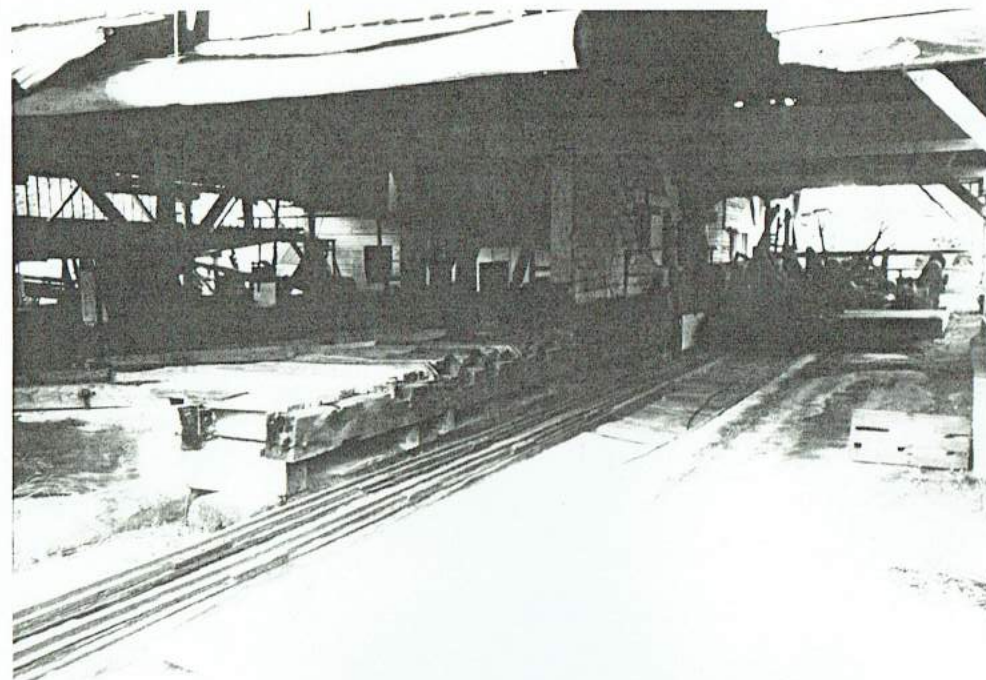
This is achieved by a twist in the long belt held drive below floor level from the main drive shafts.

These saws and drive shafts need preservation.

5.3.2.13 Twin Saw Skids & Power Rollers

The flitches cut from the log on the twin saws are handled by a system of rollers for movement parallel to that of the traveller carriage rails and are moved at right angles onto the No. 1 saw bench skids by a system of powered chains. This is shown in Photo 22, 23 and 49.

All this system remains in reasonable condition including the under floor drive system and is recommended for preservation.



EXISTING
49. Twin Saw Skids & Power Rollers. 1994

5.3.2.14 No. 1 Saw Bench

Flitches are moved from the skids with one end of the flitch positioned on a four wheel rail trolley and the other on the No. 1 saw bench roller for movement through the saw using the powered bench rollers. This is shown in Photo 23.

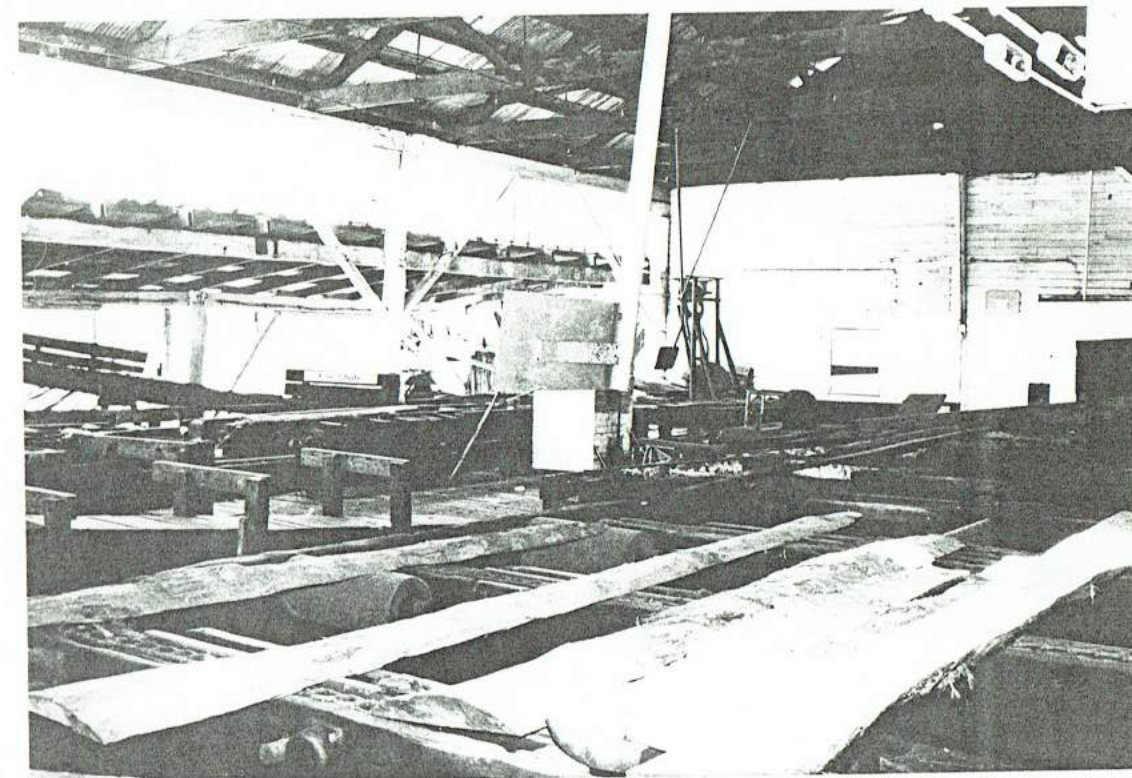
By reversing the rollers the timber was moved back over the bench to enable it to pass through the saw again as required.

The saw bench powered rollers and rail trolleys either side of the saw bench and the drive equipment under the floor remains in reasonable condition.

The equipment is all under the main roof protected from the weather, and is recommended for preservation.

5.3.2.15 Powered Rollers and Chains for Movement of Timber to the No. 1 Docker and No. 2 & 3 Saw Benches.

Timber from the No. 1 saw bench was unloaded from the rail mounted trolley onto powered chains, which moved the timber sideways to the north onto rollers for either movement to the No. 1 docker and to the storage yard or No. 2 saw bench or further east for further sideways movement to the north for loading onto the rail trolley for entry to No. 3 saw bench (Refer plan Appendix 4). The power chains and rollers are shown on Photo 50 and Photo 24.



EXISTING
50. Power Roller And Chains For Movement Of Timber From No. 1 Saw Bench. 1994

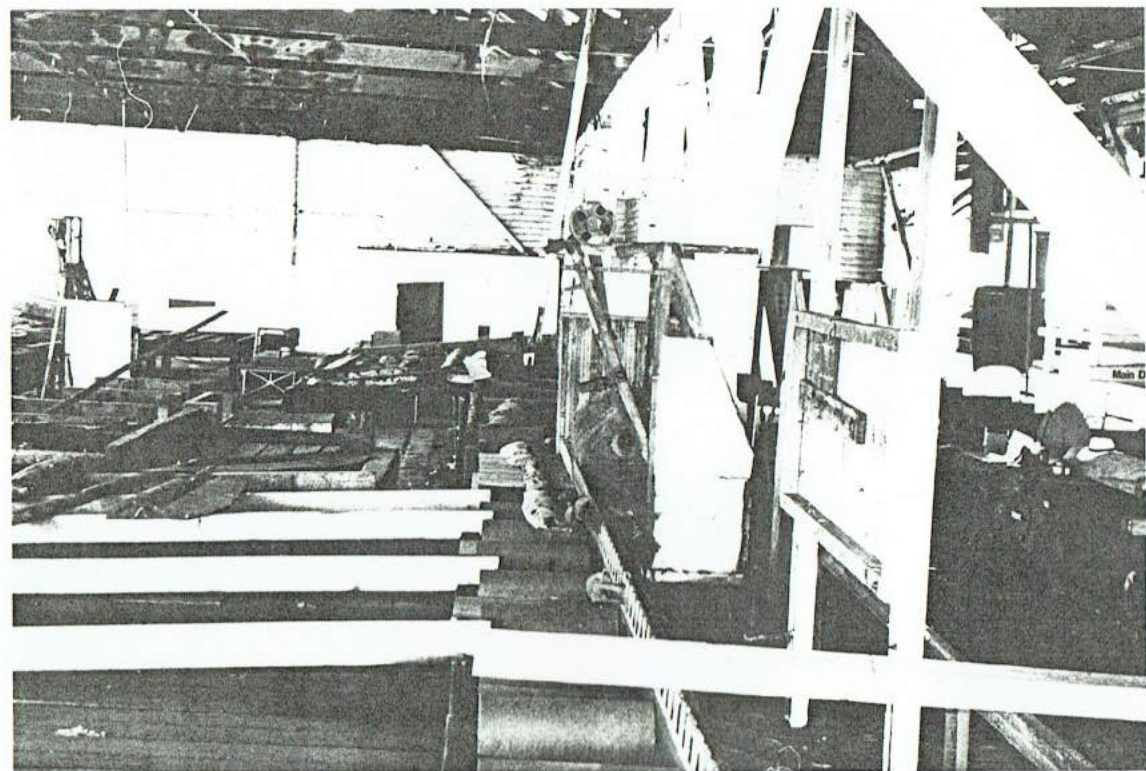
The direct drive to the saws resulted in all saws rotating in the same direction requiring timber to move into the saw bench from the west direction.

All the powered rollers and skid chains and rail trolleys remain in position and should be preserved.

5.3.2.16 No. 1 Docker Saw

No. 1 docker remains in position and should be preserved.

Photo 51 shows the saw and rollers for movement of the timber either to the storage yard or sideways onto the skids leading to No. 2 saw bench.

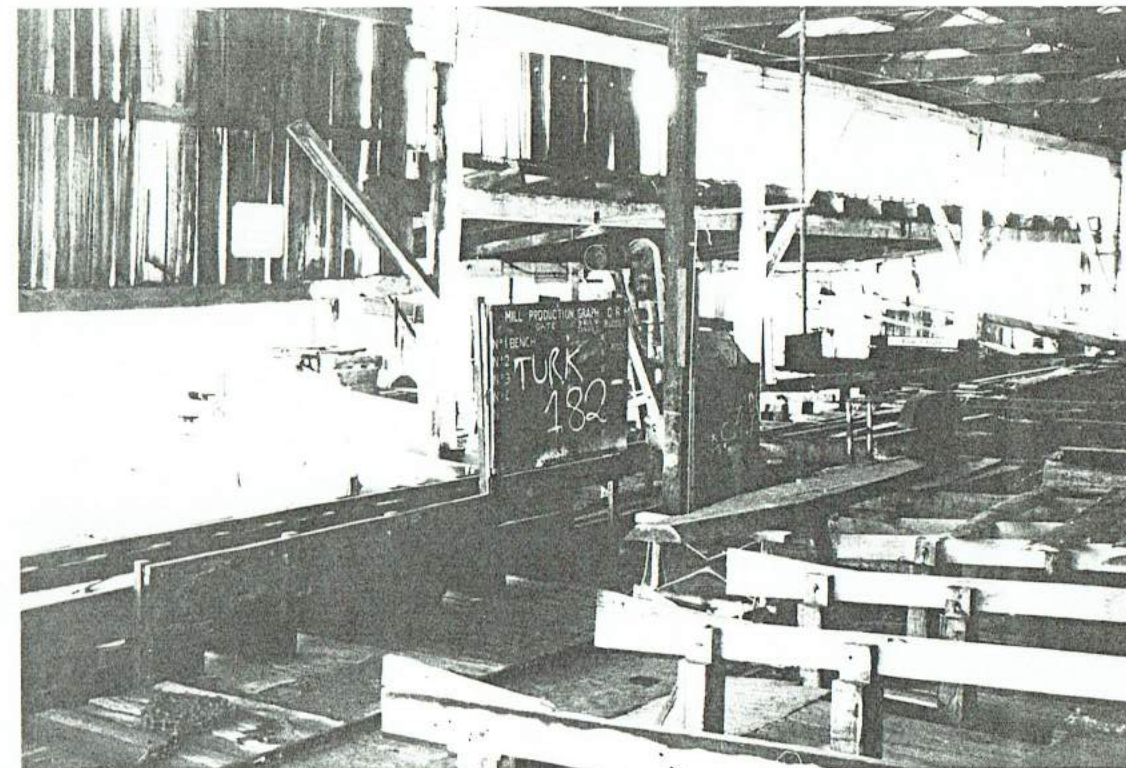


EXISTING
51. No. 1 Docker Saw. 1994

5.3.2.17 No. 2 Saw Bench and Docker

Photo 6 and 52 shows the No. 2 saw bench and No. 2 docker saw and the skids leading to the rail trolley feeding the saw.

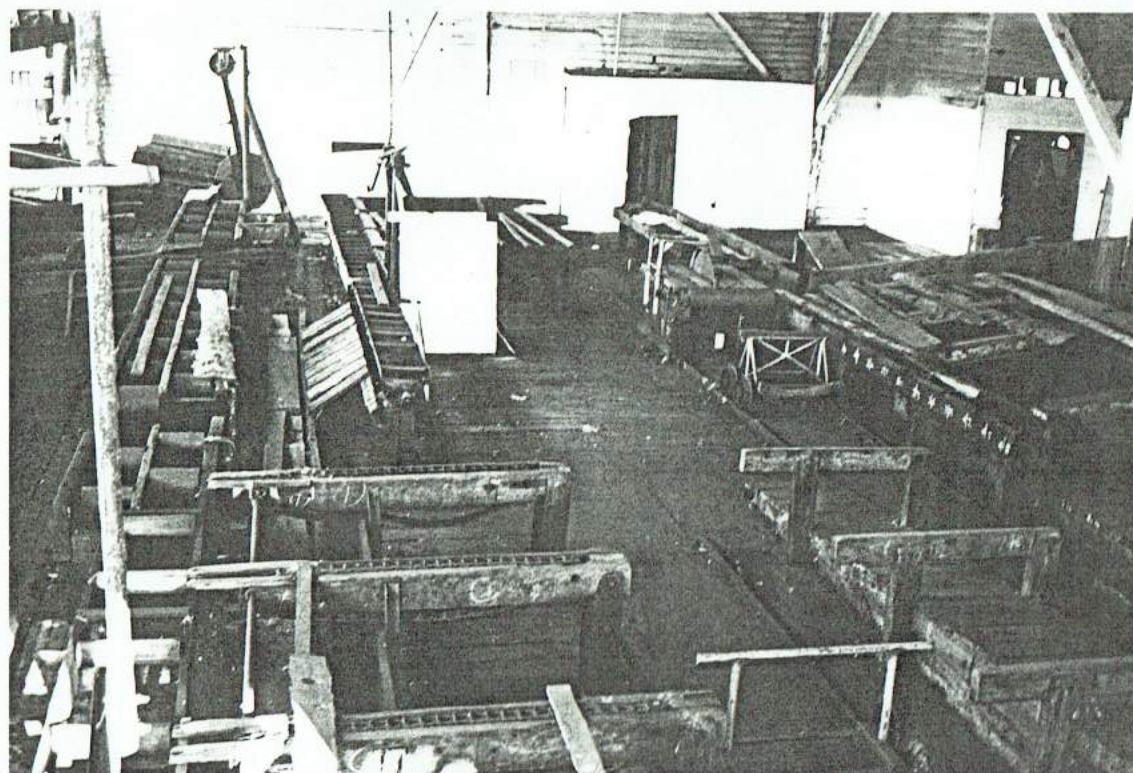
All this equipment remains and should be preserved.



EXISTING
52. No. 2 Saw Bench and No. 2 Docker Saw. 1994

Photo 53 shows the inclined cover to the belt drive from below the floor to No. 2 saw bench, and also the rail trolley taking timber from the bench for loading onto the powered skid chains for movement sideways onto rollers and conveyors for the timber to move to the No. 2 docker and to the sorting shed.

All this equipment including skids, powered chains and rollers and docker saw should be preserved.



EXISTING

53. * Powered Chains, Rollers and Conveyors From No. 2 Saw Bench.

5.3.2.18 No. 3 Saw Bench, No. 3 Docker Saw, and Firewood Docker

Photo 53 shows in the background No. 3 saw bench, No. 3 Docker saw, Firewood Docker and the rail trolley, rollers, skids and powered chains for handling timber through the saws. (In the background is the wall of the steam engine building)

All this equipment should be preserved. The rollers for moving timber from the No. 2 docker and onto the conveyor belt leading to the sorting shed are shown.

Also shown are the rollers for moving timber to the west to the No. 2 docker saw or to the east to the firewood docker (at the back of the photo).

The firewood chute is shown behind the firewood docker, and the fire hole chute in front of the docker.

All this should be preserved.

5.3.2.19 Conveyor and rollers to the Sorting Shed

This conveyor and rollers (Photo 53) leading to the sorting shed (together with the rollers leading from saw bench No. 1) are the means of moving sawn timber out of the mill.

The powered conveyor and rollers remain and should be preserved.

Evidence of the conveyor belt remains.

5.3.2.20 Sorting Shed

Photo 9 indicates the sorting table over which the small or sawn timber from the No. 2 and No. 3 saw benches and docker was sorted, the timber being moved along the inclined table by powered cables.

The sorting table is within the control of Briefcase Holdings Pty Ltd however this is a key element of the mill process and should be included in the mill site and preserved.

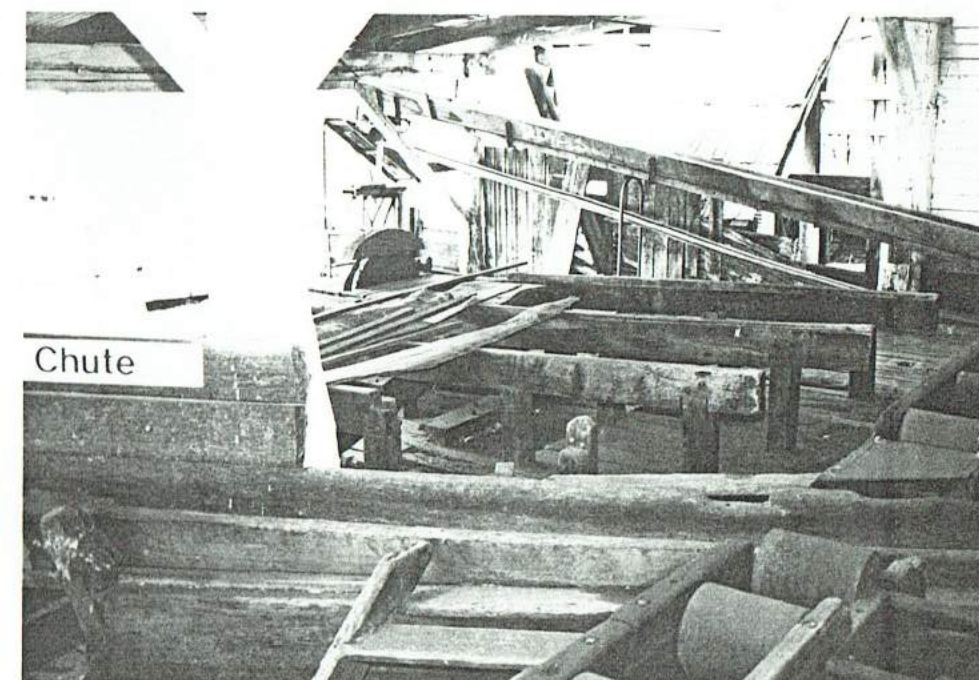
The roof of the sorting shed is in need of maintenance and is fundamental in preserving the sorting table and equipment.

The equipment needs fitter attention to overcome metal corrosion.

5.3.2.21 No. 4 Saw Bench

This saw bench (Photo 54) is located on the north side of the mill floor located under the annex roof at the eastern end. Timber could be moved to this saw along the rollers from the No. 2 docker saw.

The saw remains and should be preserved.

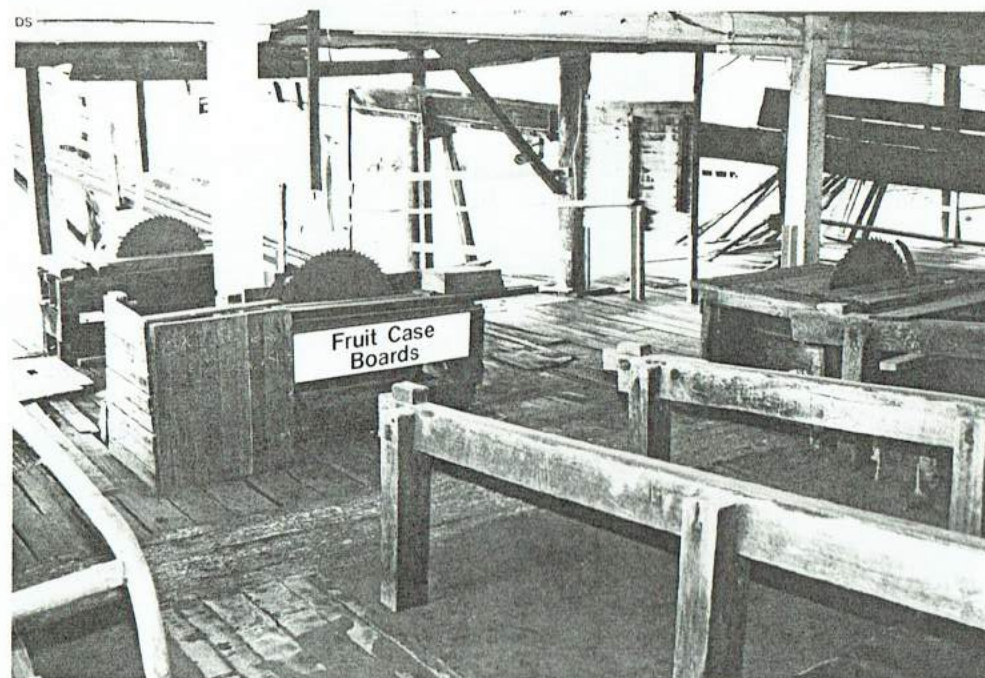


EXISTING

54. * No. 4 Saw Bench, Fire Chute And Fire Wood Conveyor.

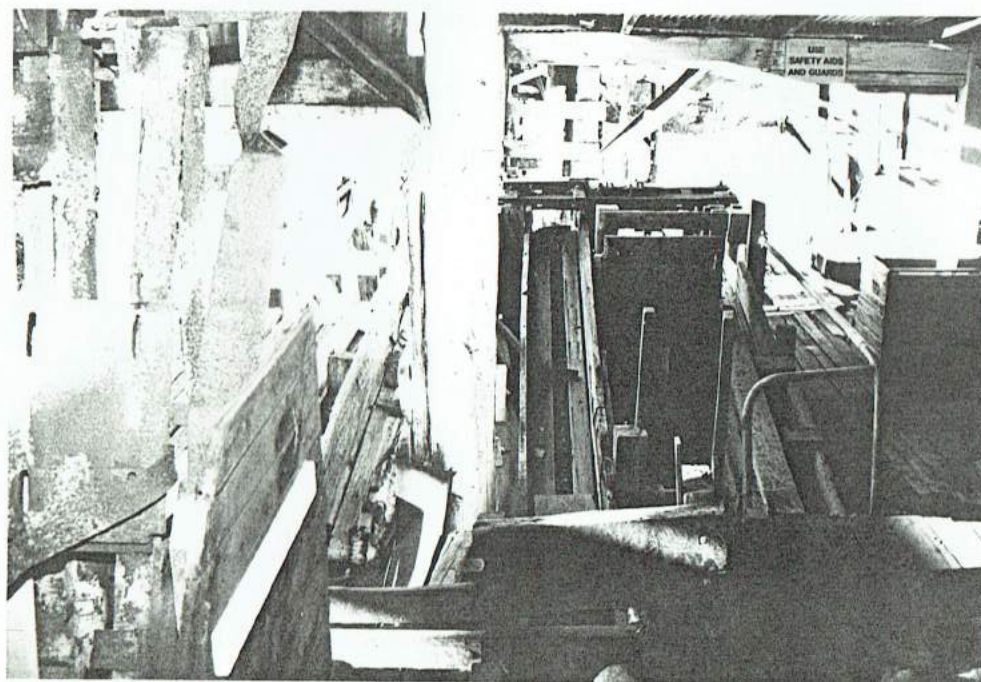
5.3.2.22 Fruit Packing Case Area

This area is located under the annex roof on the northern extension of the mill floor. (Photo 55)



EXISTING
55. Fruit Case Saws. 1994

Three saws are located in this area with the smaller sized timber being moved into the area from the No. 1 docker along the inclined conveyor under the mill floor. (Photo 56)



EXISTING
56. Under Floor Conveyors From No. 1 Docker To Fruit Case Area And Waste Chute (Left Side Of Photo).

Timber was also moved into this area along the rollers between the No. 2 and 3 dockers. (Photo 53)

The three saws and chutes remain and the area should be preserved to indicate the steps taken to utilise the small sized timber to produce the timber fruit packing cases which were a world wide feature of the fruit industry from the surrounding regions of Bridgetown, Donnybrook and Manjimup.

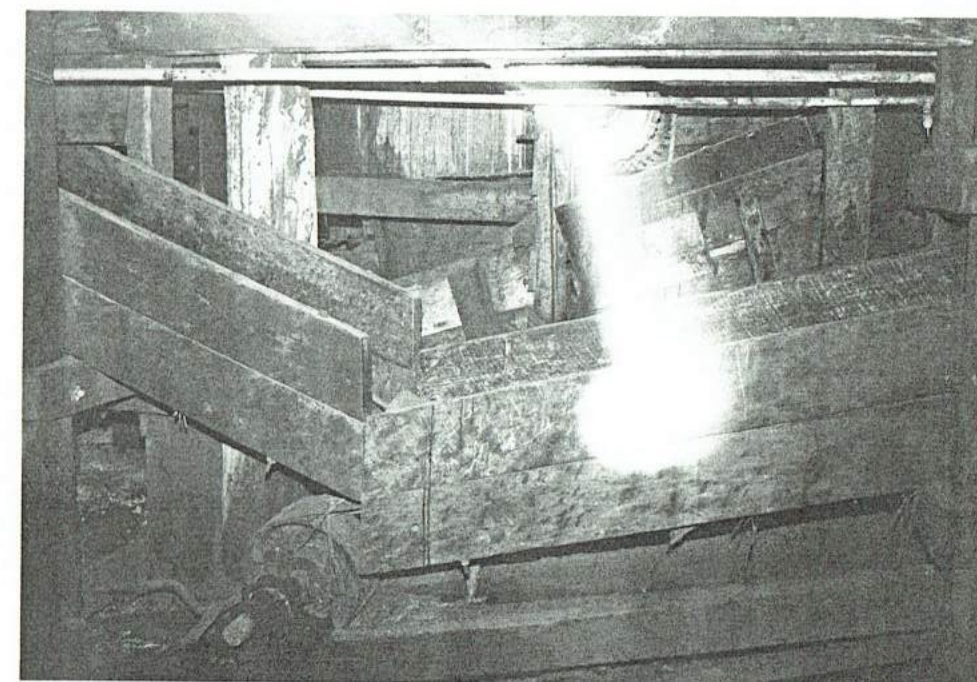
The annex roof requires reconstruction and sections of the floor.

5.3.2.23 Fire Hole and Conveyors

Waste timber from the three docking saws was fed along two conveyors to the fire hole for burning.

One conveyor located under the floor took timber from the No. 1 and 2 docker. (Photo 57 and 56 on the left side), and the other from No. 3 docker shown in the foreground of Photo 54.

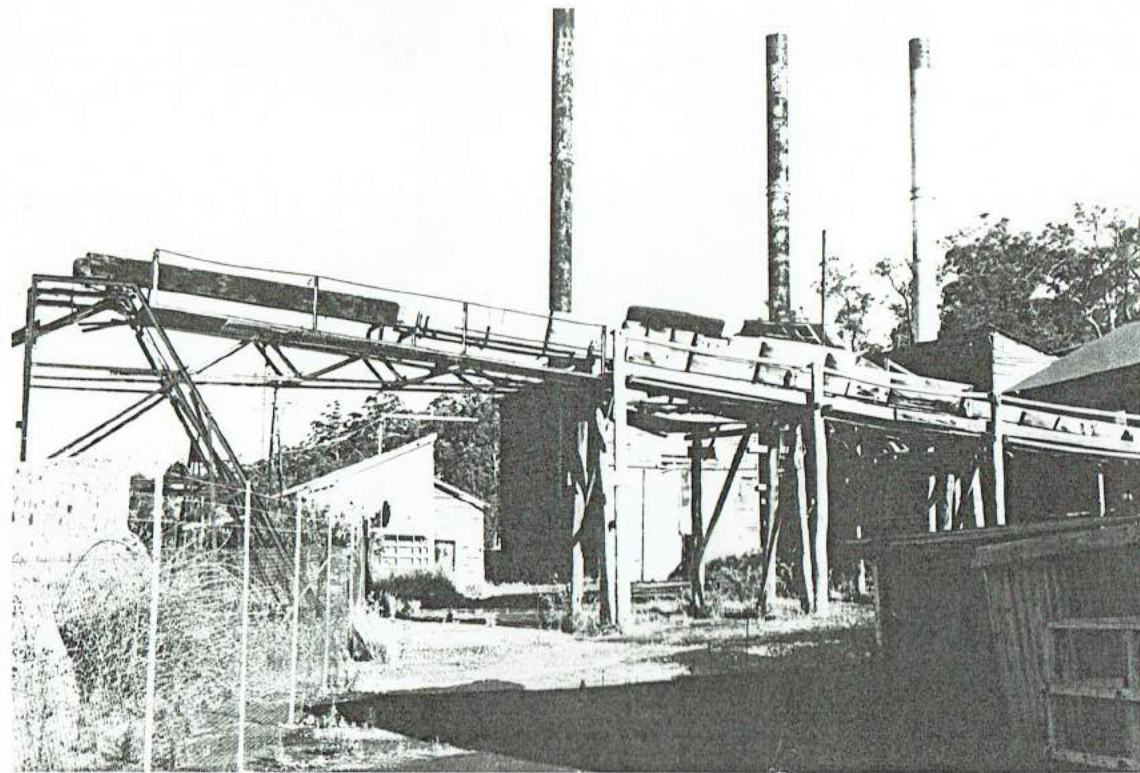
Photo 25 shows the fire hole in operation and photo 58 shows the support structure for the conveyors to the fire hole.



EXISTING
57. Underfloor Timber Chute.

The conveyors under the mill floor and annex roof should be preserved and also the fire hole.

Much of the structure supporting the conveyors is of steel construction and should be preserved and an attempt to retain the timber structures to adequately interpret the fire hole.



EXISTING
58. Conveyor Support Structure And Fire Hole.

3
5.2.2.24 Fire Wood Chute

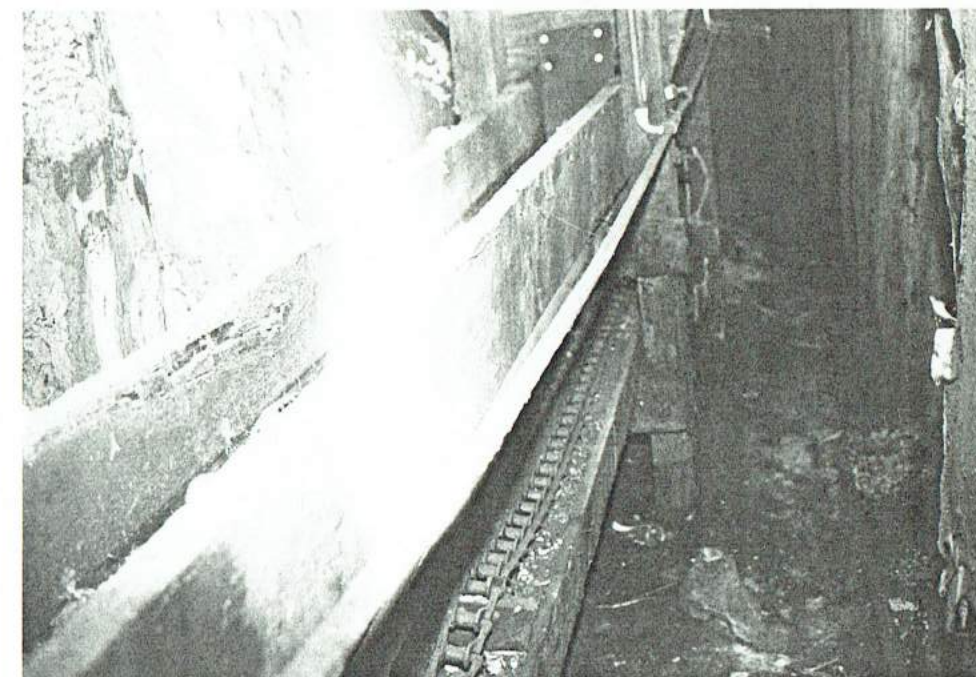
Photo 54 indicates the conveyor in the background taking firewood from the firewood dock for delivery to the boiler.

This is under the annex roof and should be retained.

3
5.2.2.25 Saw Dust Conveyors

The conveyors under the mill floor collecting sawdust from the twin saws, and No's. 1 & 2 saws for delivery to the sawdust hopper for boiler fuel was a unique feature of the mill.

The conveyor drive equipment and conveyor remain and should be preserved.



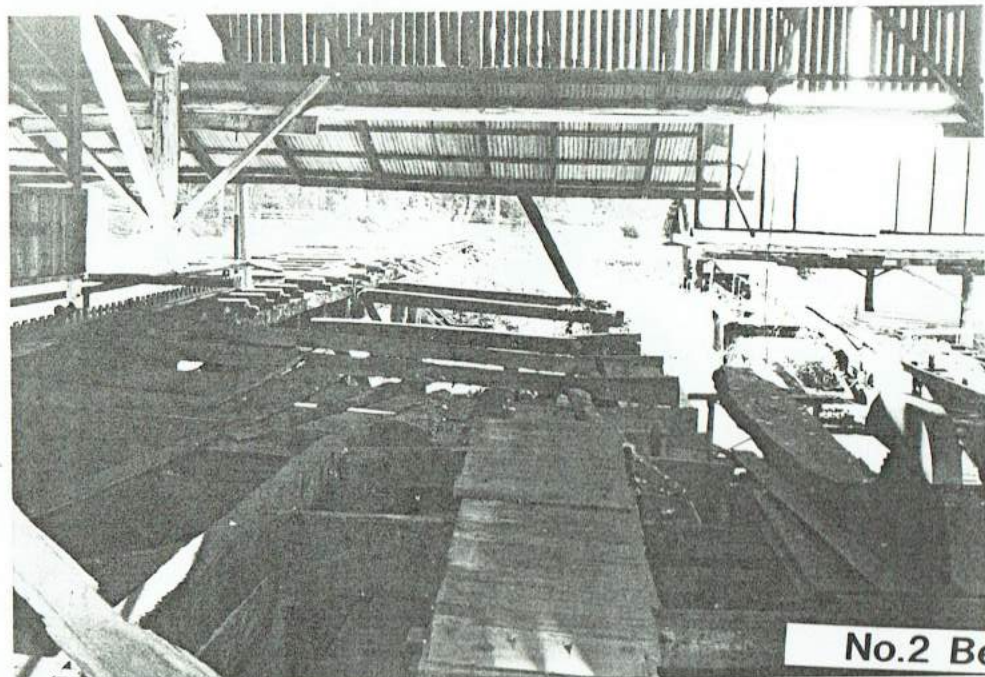
EXISTING
59. Under Floor Saw Dust Conveyor.

5.3.2.26 Storage Skids

The rollers from the No. 1 dock conveyed the larger sized sawn timber to storage skids west of the mill roof area for later loading onto rail trolleys for movement to the yard area.

Photo 60 indicates the rollers in the middle picture and the storage skids in the background.

This equipment is a key feature illustrating the method of moving timber from the mill to the yard and should be preserved. The equipment is in reasonable condition.



60. ^{EXISTING} Rollers From No. 1 Docker To Storage Skids.

5.2.2.27 Under Floor Drive Equipment

A feature of steam powered mills with power from a single prime mover (steam engine) was the system of drive shafts, pulleys, belt system, and chain drives to the mill equipment.

The extent of the drive equipment and for safety reasons it was the practice for this equipment to be located under the mill floor with the belt and chain drives rising through the floor to the saw benches and rollers.

On first entering the mill at floor level the existence of the underfloor drive equipment is not apparent. Most of the belt drives are also under covers.

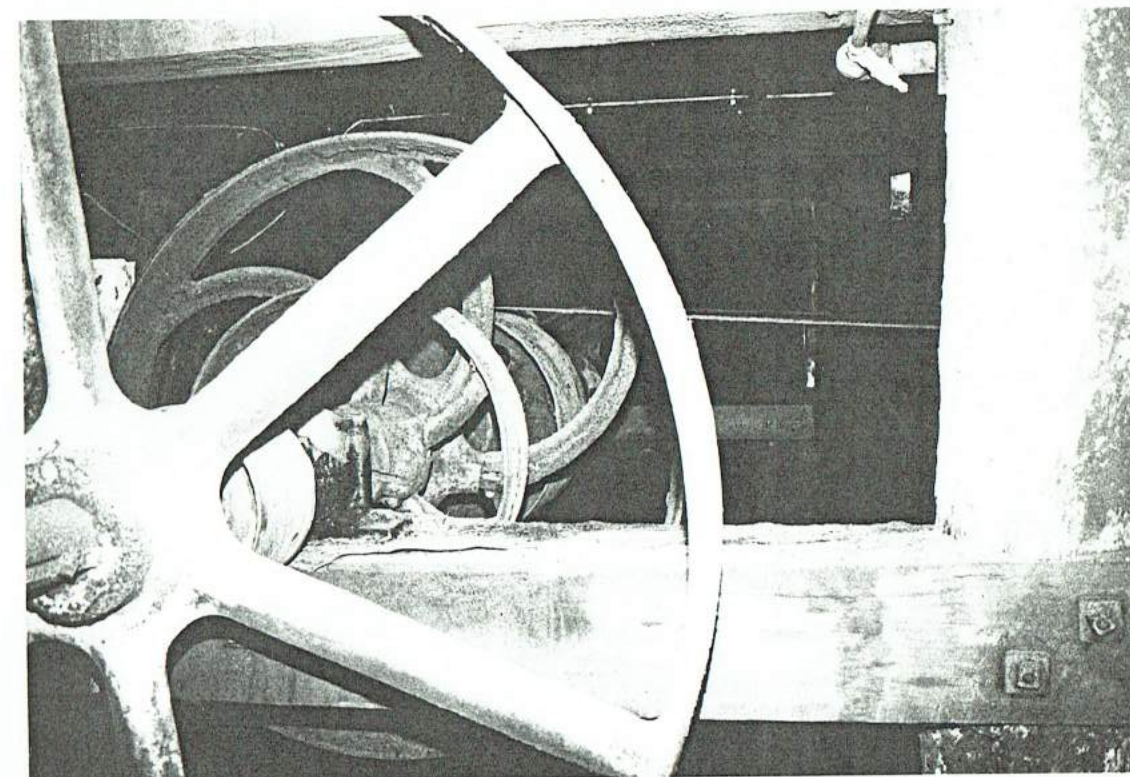
Access to the equipment under the floor is by opening trap doors let into the floor providing access to ladders, these being more than underfloor headheight available. Access can also be obtained from the open northern end of the building.

The under floor area was illuminated by electric light with a fully equipped fitters workshop. A fire protection underfloor sprinkler system was also installed. This equipment remain and needs to be reconstructed.

Natural clay forms the floor of the underfloor area with a drainage system to remove stormwater which may have bypassed the surface cut off drain on the south and north sides of the mill.

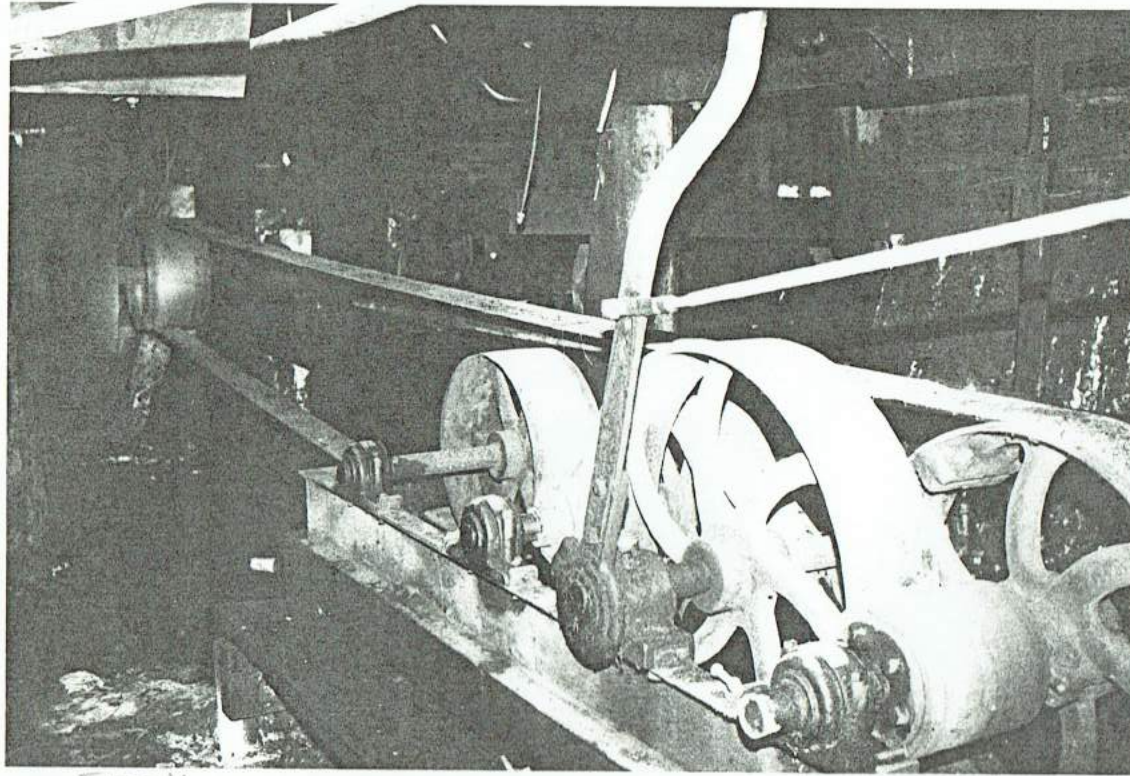
The drive systems remain and in some instances can be turned by hand.

Photos 7, 30 and 31 indicate some of this equipment and photo 61 below shows one of the existing drives.



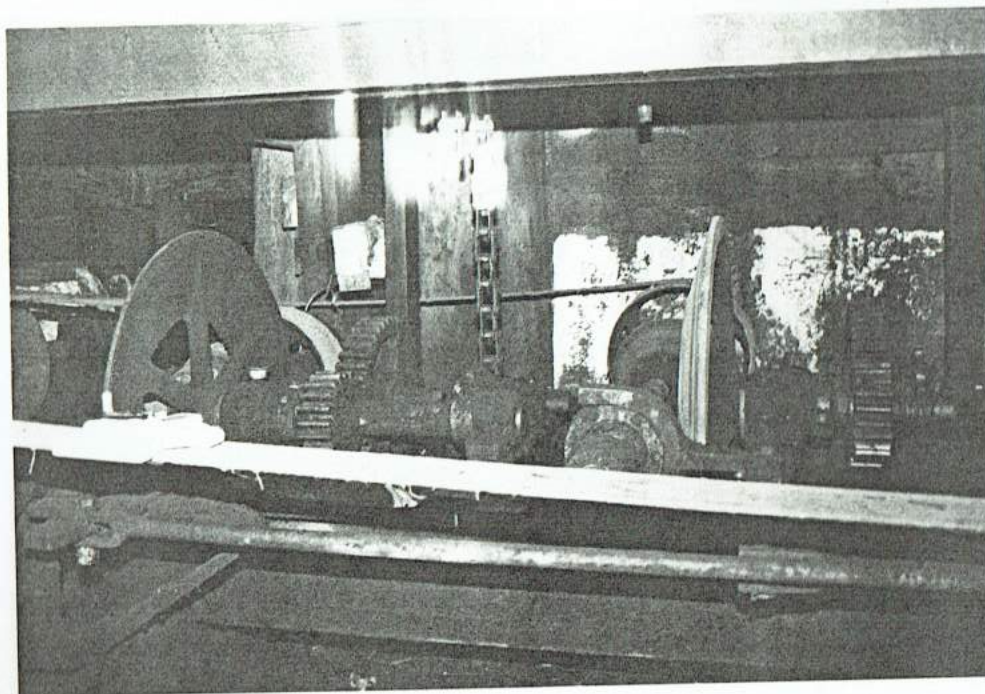
61. ^{EXISTING} One Of The Underfloor Drives.

Photo 62 below shows the existing mechanism for the drive of the bench saw rollers for forward and reverse and the lever control going up above the mill floor.



EXISTING
62. Underfloor Drive Mechanism To Powered Bench Rollers.

Photo 63 shows the mechanism for a right angle change in drive direction with a forward and reverse action for conveyor and skid chain drives.



EXISTING
63. Underfloor Drive Mechanism To Powered Skid Chains.

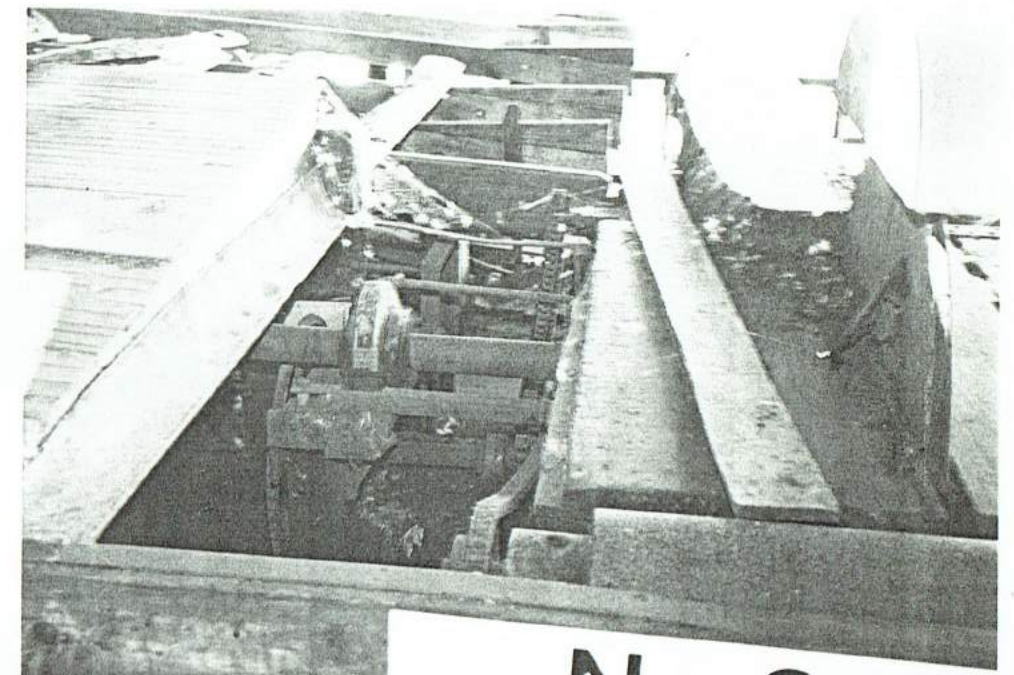
Photo 64 taken through an opening in the mill floor shows the below floor mechanism for the No. 2 saw bench.

The above photographs indicate the completeness of the drive mechanisms illustrating the equipment necessary to drive a large steam powered mill.

This equipment needs fitter attention to control corrosion with provide the potential to turn some of the equipment in the future to adequately interpret the mill.

The underfloor timber support structure is in reasonable condition however the floor drainage needs to be opened up and reinstated together with the cut off drains on the south and north side of the mill.

This underfloor equipment is a rare example of timber mill industrial archaeology and is in need of preservation.



EXISTING
64. Underfloor drive for No. 2 saw bench.

5.4 COST ESTIMATES

5.4.1 Priority Item costs. The cost estimates for the priority items listed in paragraph 6.2 are listed below.

1.	Water Supply and Fire Hydrants	Allow	\$	25,000
2.	Security Fence		\$	3,000
3.	Roof Structure			
3.1	Centre column at west end of mill building		\$	3,000
3.2	Main mill roofing and box gutter and downpipes		\$	10,000
3.3	Fruit case annex <i>roof</i>		\$	10,000
4.	Flooring in fruit case annex		\$	5,000
5.	Drainage		\$	8,000
6.	Engine room walls		\$	4,000
7.	Chimney stack	Allow	\$	5,000
8.	Fungicide treatment of timber columns at ground level		\$	4,000
				<u>86,000</u>
				90,000

5.4.2 Building

Policy recommendation costings. The cost estimates for the items listed in paragraph 5.3.1 are listed below.

5.4.2.1 Fire Hydrants

This cost has been included in 5.4.1 above, however the water supply system is fundamental and assessment of this and the cost including pumps, tanks and connecting main should be carried out together with Briefcase Holdings Pty Ltd.

5.4.2.2 Drainage

This is included in paragraph 5.4.1.

The items requiring immediate attention include Items 2, 3.1, 3.2, 3.3, 5 and 8 totalling \$38,000

5.4.2.3 Main Mill Building

This is included in paragraph 5.4.1 however a further \$10,000 should be allowed. \$10,000

5.4.2.4 Electric Power

Further lighting and power to supply an air compressor. \$15,000

5.4.2.5 Annex Building

The fruit case area is allowed for in 5.4.1 however for the annex at the western end of the main building. \$3,000

5.4.2.6 Security Fence

Allowed for in paragraph 5.4.1.

5.4.2.7 Steam Engine Building

Allow for cladding. \$5,000

5.4.2.8 Boiler Room

Allow for cladding. \$10,000

5.4.2.9 Kiln Steam Boiler Building

Allow for cladding. \$5,000
Asbestos roof. \$15,000

5.4.2.10 Log Winch Building

Reconstruction. \$10,000

5.4.2.11 Precut Building

Cladding. \$2,000

5.4.2.12 Saw Dust Hopper

To be assessed, for short term work. \$6,000

5.4.2.13 Sorting Shed

Roofing. \$10,000

5.4.2.14 Steel Chimneys

Assess and replace steel stays, strengthen bases and paint. \$30,000

5.4.2.15 Drying Kiln Foundation

Extend security fence. \$3,000

5.4.2.16 Planer Building

Area for future adaption. No cost.

5.4.2.17 Saw Sharpening Building

Allow. \$5,000

5.4.2.18 Toilets

Upgrading not a heritage item to be assessed separately.

5.4.3 Equipment

The items listed in 5.3.2 are costed in this section.

5.4.3.1 Robey Steam Engine

Corrosion control. \$4,000
No allowance for an air compressor is allowed at this stage.

5.4.3.2 Bellis and Morcom Steam Engine and Alternator

Corrosion control. \$4,000

5.4.3.3 Steam Water Pumps

Corrosion control. \$2,000

5.4.3.4 Steam Boiler

Corrosion control. \$4,000
Ladders and landings. \$4,000
Equipment \$4,000

5.4.3.5 Log landings.

Reconstruction \$3,000

5.4.3.6 Log Handling Steam Winch

Corrosion control. \$4,000

5.4.3.7 Log Trolley

Corrosion control. \$1,000

5.4.3.8 Overhead Winch

Corrosion control. \$2,000

5.4.3.9 Overhead Saws

Corrosion control and replace saws. \$3,000

5.4.3.10 Traveller Log Carriage

Corrosion control. \$4,000

5.4.3.11 Traveller Log Carriage Winch

Reinstatement. \$4,000

5.4.3.12 Twin Saws

Corrosion control, some belt and drive reconstruction. \$4,000

5.4.3.13 Twin Saw Skids and Power Rollers

Corrosion protection. \$2,000

5.4.3.14 No. 1 Saw Bench

Fitter attention and belt drive. \$2,000

5.4.3.15 Powered Rollers and Chain

No. 1 Docker and No. 2 and 3 Saw benches.
Fitter attention and drivers. \$2,000

5.4.3.16 No. 1 Docker Saw

Fitter attention. \$1,000

5.4.3.17 No. 2 Saw Bench and Docker

Corrosion control and fitter attention. \$2,000

5.4.3.18 No. 3 Saw Bench, No. 3 Docker and Firewood Docker

Corrosion control and fitter attention. \$4,000

5.4.3.19 Conveyor and Rollers to Sorting Shed

Corrosion control and belt replaced. \$4,000

5.4.3.20	Sorting Shed Table	
	Corrosion control and fitter attention.	\$4,000
5.4.3.21	No. 4 Saw Bench	
	Corrosion control and fitter attention.	\$1,000
5.4.3.22	No. 5 Saw Bench and Fruit Packing Case Area	
	Corrosion control and bench reconstructed.	\$4,000
5.4.3.23	Fire Hole and Conveyors	
	To be further assessed, however allow \$2,000.	\$2,000
5.4.3.24	Fire Wood Chute	
	Allow \$3,000.	\$3,000
5.4.3.25	Saw Dust Conveyor	
	Support and belt reinstated.	\$4,000
5.4.3.26	Storage Sheds	
	Timber repair.	\$2,000
5.4.3.27	Under Floor Drive Equipment	
	Corrosion control, greasing of bearings and belt replaced.	<u>\$10,000</u>
		\$223,000
	Priority Items	<u>\$86,000</u> 90,000
		\$309,000 \$313,000

These costs are based on achieving preservation. There will be costs associated with roofing iron replacement in the future, possibly in the order of \$70,000. Depending on the degree of interpretation such as the cost of an air compressor to turn the steam engines and equipment this would be an additional cost. However, an endeavour should be made to obtain a compressor which could become available from industry.

6.0 IMPLEMENTATION OF CONSERVATION POLICY

The implementation of the conservation policy for the mill requires it be registered under the Australian Heritage Commission Act 1975 and the Heritage of Western Australia Act 1990 and also listed by the National Trust (WA) Inc.

6.1 STATUTORY HERITAGE OBLIGATION

Under the Heritage of Western Australia Act (Section 44) the Heritage Council of Western Australia is obligated to maintain a register of places which might relate with the cultural heritage of the State and assess the cultural heritage significance of the place.

The Council on completion of the record of the place is required to advise the Executive Director of the Department of Land Administration, the Registration of Titles on the Register of Deeds and Transfers, advise the owners, and advise the Town Clerk of the municipality in which the place is registered.

If the Minister responsible for the Heritage of Western Australia Act is satisfied the place meets the criteria set out in Section 47 of the Act the Minister may direct the Heritage Council of Western Australia to enter the place in the Register.

The object of the Act (Section 4A) is to identify, conserve and where appropriate enhance those places within Western Australia which are of significance to the cultural heritage.

Under the Act (Section 73) the Minister is able to acquire the place where it is considered cultural heritage significance is in jeopardy and the Council (Section 33) provide financial assistance for conservation or preservation.

The Australia Heritage Commission Act (Section 22) requires a register of the National Estate to be maintained.

The Mill is owned by the Crown vested in the Minister for Tourism and with due consultation between the Ministers concerned the provision is available to provide financial resource to conserve the place.

Under Section 31A a State may apply to the Minister for financial assistance under the grants program in respect of National Estate Projects.

It is therefore recommended that the Mill be placed on the register under the Heritage of Western Australia Act 1990 and the register of the National Estate and that application be made for funding assistance for the conservation.

6.2 ESSENTIAL MAINTENANCE

The priorities for essential maintenance to prevent further significant deterioration of the fabric over the next 12 months are as follows:

1. Upgrading of the water supply and fire hydrants around the mill.
2. Repair of the wire security fence around the site.
3. Initiate repair of the roof structure and replacement of roofing, and the roof drainage, particularly the fruit case annex area.
4. Repair flooring in the fruit case annex area.
5. Reinstate surface drainage on the north and south side of the mill building and under the mill floor.
6. Maintenance of the engine room walls and roof to ensure security of the steam engines.
7. Assessment of the structural adequacy of the three chimney stacks.

6.3 MANAGEMENT GUIDELINES

To achieve the conservation policy requires the allocation of finance.

Due to the technical nature of the restoration work it is proposed that this work be carried out under the supervision of a technical consultant appointed by the Heritage Council to undertake and implement the work according to the approved criteria of the Heritage Council.

An advisory committee should be formed with representation from the Tourist Commission, Shires of Manjimup, Bridgetown and Nannup, Manjimup Historical Society, National Trust, Lessee of the Donnelly Holiday Village and a representative nominated by the Heritage Council and the technical consultant responsible for restoration.

The mill site is currently leased by the Tourist Commission to the Lessee of the Donnelly Holiday Village. Discussions with Mr Ray Moss of Briefcase Holdings Pty Ltd indicate that the company would agree to the mill site being excised from the lease.

The guidelines for the restoration would be to proceed with work listed in Section 5 which is based on the conservation of the entire fabric of the mill, with priority being allocated to the items listed in paragraph 6.2 of this report.

The nearby mill town outlined in Appendix 1 together with the Donnelly River and nearby forest are important in the wider interpretation of the significance of the place.

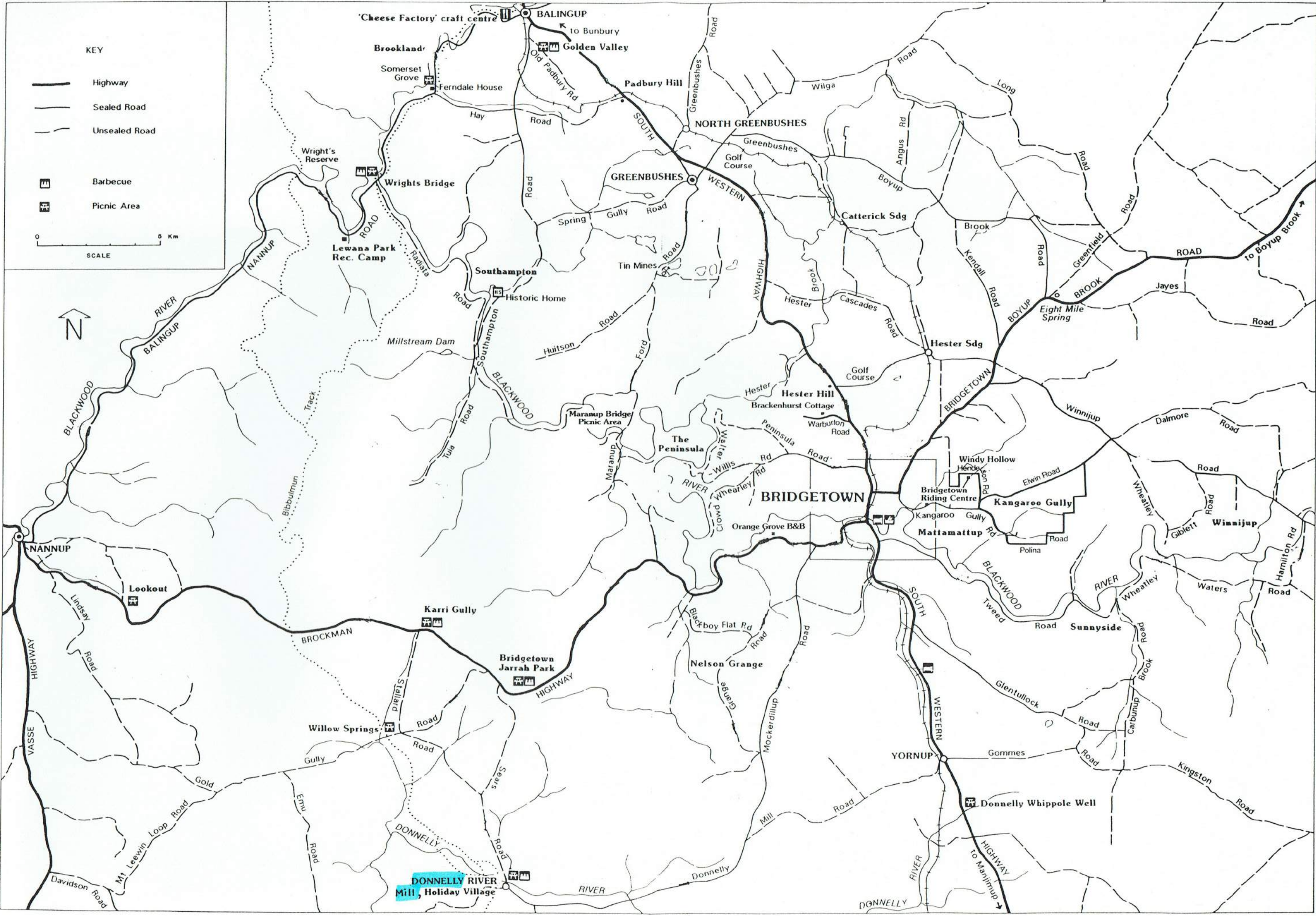
The restoration of the steam engines, mill drives etc. and the provision of compressed air to turn the operating equipment would further assist with the future interpretation.

Besides providing a significant example of industrial archaeology of educational value the mill also represents a focus for tourism and possible potential for the development of a specialised wood working manufacturing industry.

The outline plan of the mill included in Appendix 1 indicates two areas which could be utilised for the proposed development, these being the planer and mill yard areas.

APPENDIX 1.

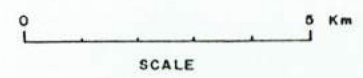
Mill Location Plan



KEY

- Highway
- Sealed Road
- Unsealed Road

- Barbecue
- Picnic Area



APPENDIX 2.

Mill Site Layout, Bunnings Plan 10531



2 Nos 2 L Z-Series B Pump
 15 HP 1740 RPM Motor
 6" x 3" P.V. 1/2"

Legend:

- Water pipes & direction of flow
- Power lines & poles
- Fire Hydrants
- Hose boxes

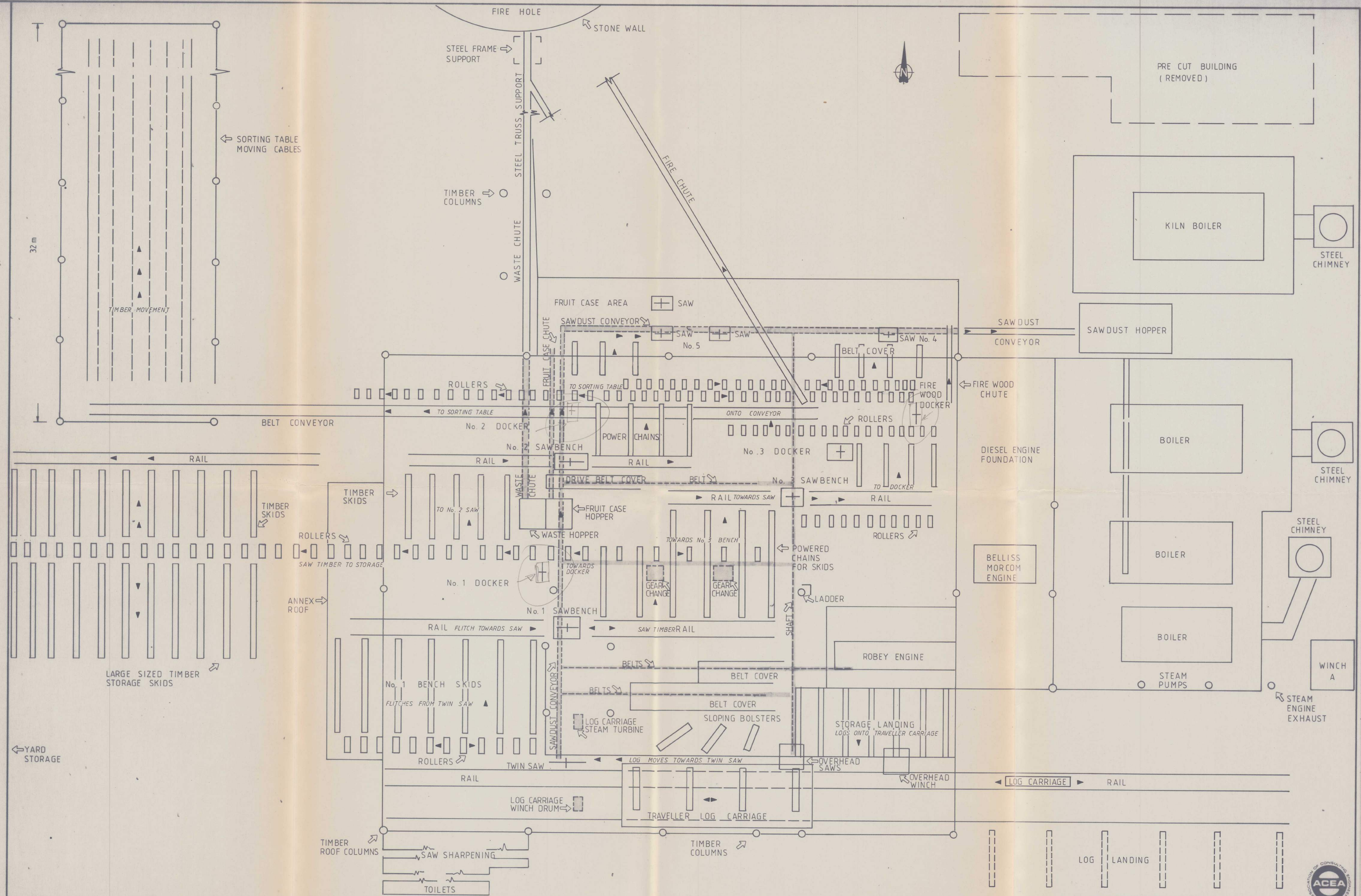
BUNNING BROS. PTY. LTD. PERTH				DATE	SCALE	MILL LIST NO.
Donnelly Mill				19/12/62	100' to 1"	
Township & Mill Site				DRAWN	DRAWING NUMBER	
Layout				CHECKED	AO-10531	

APPENDIX 3.


Mill Equipment Layout

APPENDIX 4.

Path of logs through the Mill (Refer Section 2.2.4)



► DENOTES TIMBER MOVEMENT

LOCAL AUTHORITY		 1:100	DESIGNED	JLP	APR 94	FILE NAME	REV	AMENDMENT	DESCRIPTION	DATE	DRAWN	G. B. HILL & PARTNERS PTY. LTD. CONSULTING ENGINEERS 62 COLIN STREET, WEST PERTH, W. A. 6005 Telephone 322 5990 Fax 321 6185		DENOTES TIMBER MOVEMENT	
SHIRE OF NANNUP			DRAWN	HJW	APR 94	DATUM						CLIENTS HERITAGE COUNCIL OF W.A.	DONNELLY RIVER MILL		
			EXAMINED			AHD									
			CHECKED			JOB No									
			APPROVED			4778-01									
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APPENDIX 5.

Forestry Department Report on Mill Development 21st February 1955

CONSERVATOR OF FORESTS.

Notes on visit to Donnelly Mill
(Wheatley)

1. Peelers. The Manager (Mr. Britten) said that Mr. Bunning had advised by 'phone that he wished to do what he could to help the "peeler" position by having logs selected and railed from Wheatley. Logs on the landing were examined from the "peeler" aspect, and discussed. Ways and means of extracting peelers were discussed, and it was agreed that a peeler bay could be put in on the East end of the landing in such a position that "H" trucks could be loaded without undue difficulty.

2. Drying kilns (2 compts.) have been established, and are working on production of karri for flooring. A novel method of stacking and handling by means of mobile crane, has been devised, which reduces the need for a rigid rail and stacking skid lay-out, and makes for much more flexible working. A site is cleared for a further 2-compt. kiln.

3. Planer shed site is cleared and levelled but the building has not yet been commenced.

4. "Pre-cutting" was being done on karri beams about 8' x 8', in preparing them for "sets" for a mining timber order for the Goldfields. It appeared to be working quite efficiently with a "Nolex" docker, and another portable circular saw.

5. Swimming Pool. - Clearing of the site, and provision of an earth bank with clay core has commenced on the stream east of our houses. Trees to be inundated are being removed, as well as some useless marri which would otherwise impede the view of some attractive karri along the gully.

The whole site can be made most attractive. The Manager proposes some terracing of the bank and planting of trees, shrubs and grass. He will provide all timber, and requests we assist with advice and labour, a request which I recommend be met. - I have requested Forester Forrest to co-operate in selection and marking of trees for removal and generally in improving the site.

6. Sports ground is cleared and the oval in use. A concrete pitch is also in use. Although mostly bare, sown couch grass is rapidly taking hold.

7. Housing. Bunnings expect to require to build north of the river. A contour plan and some town planning is necessary to be approved by you before any construction is commenced.

I would like to discuss with you utilisation and timber quality.

REGIONAL SUPERINTENDENT.

For your information.

D.F.O. MEACHEM, PEMBERTON.

21/2/55.
DWRS/AT.

REGIONAL SUPERINTENDENT.

APPENDIX 6.

List of timber mills constructed in the South West

**LIST OF EARLIER TIMBER MILLS IN THE SOUTH WEST
OF WESTERN AUSTRALIA**

Sources Bibliography items 1 to 4

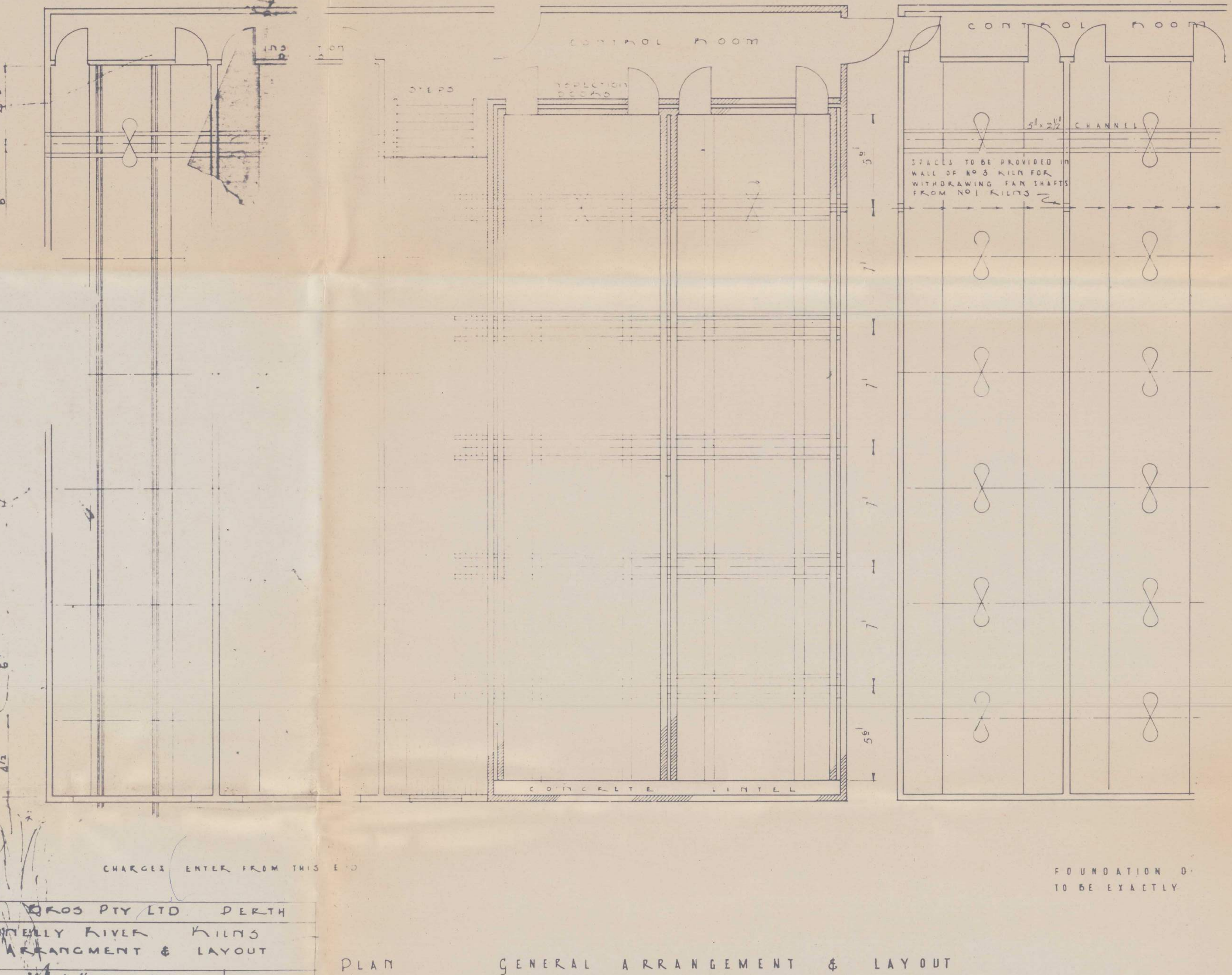
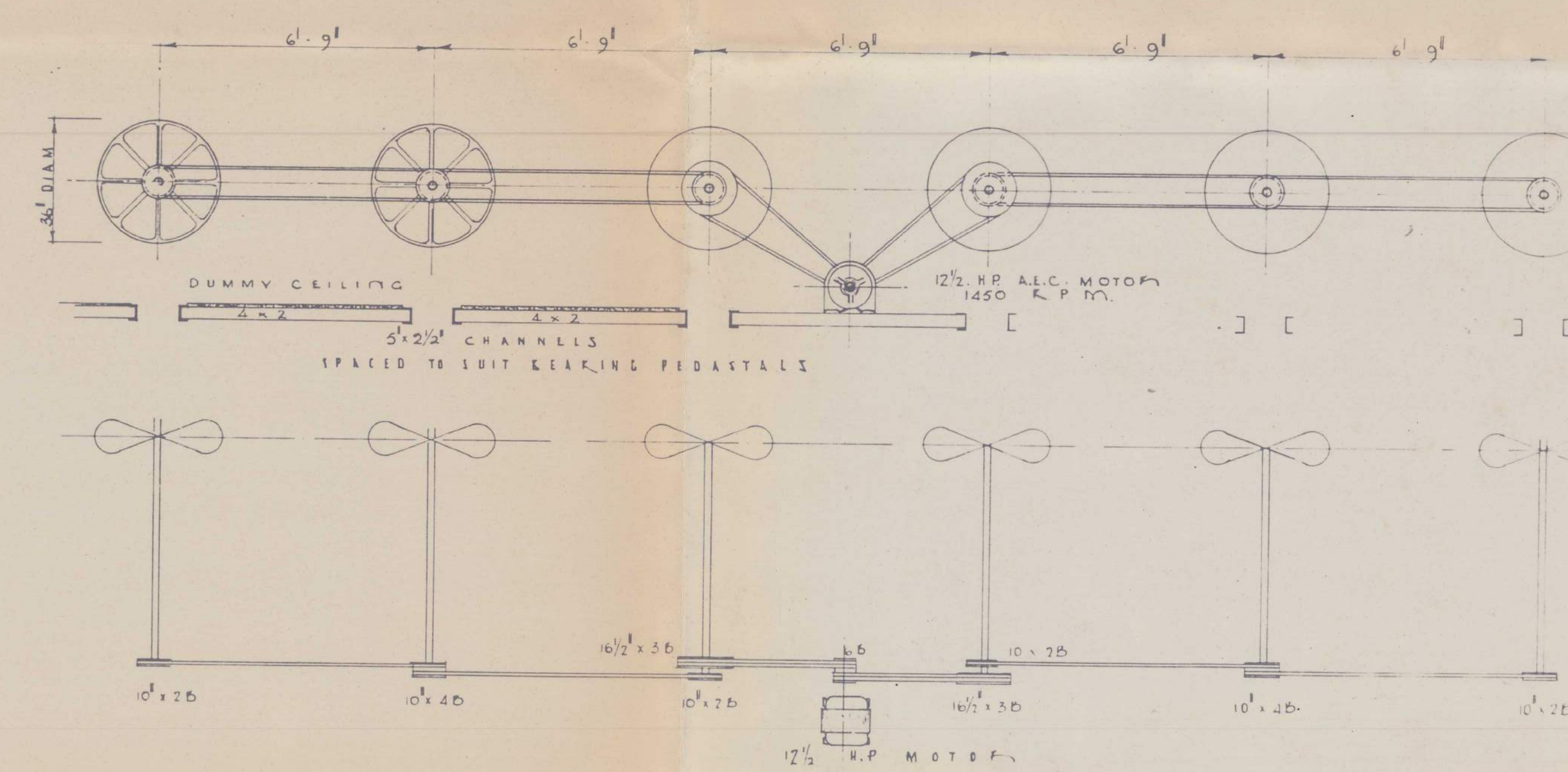
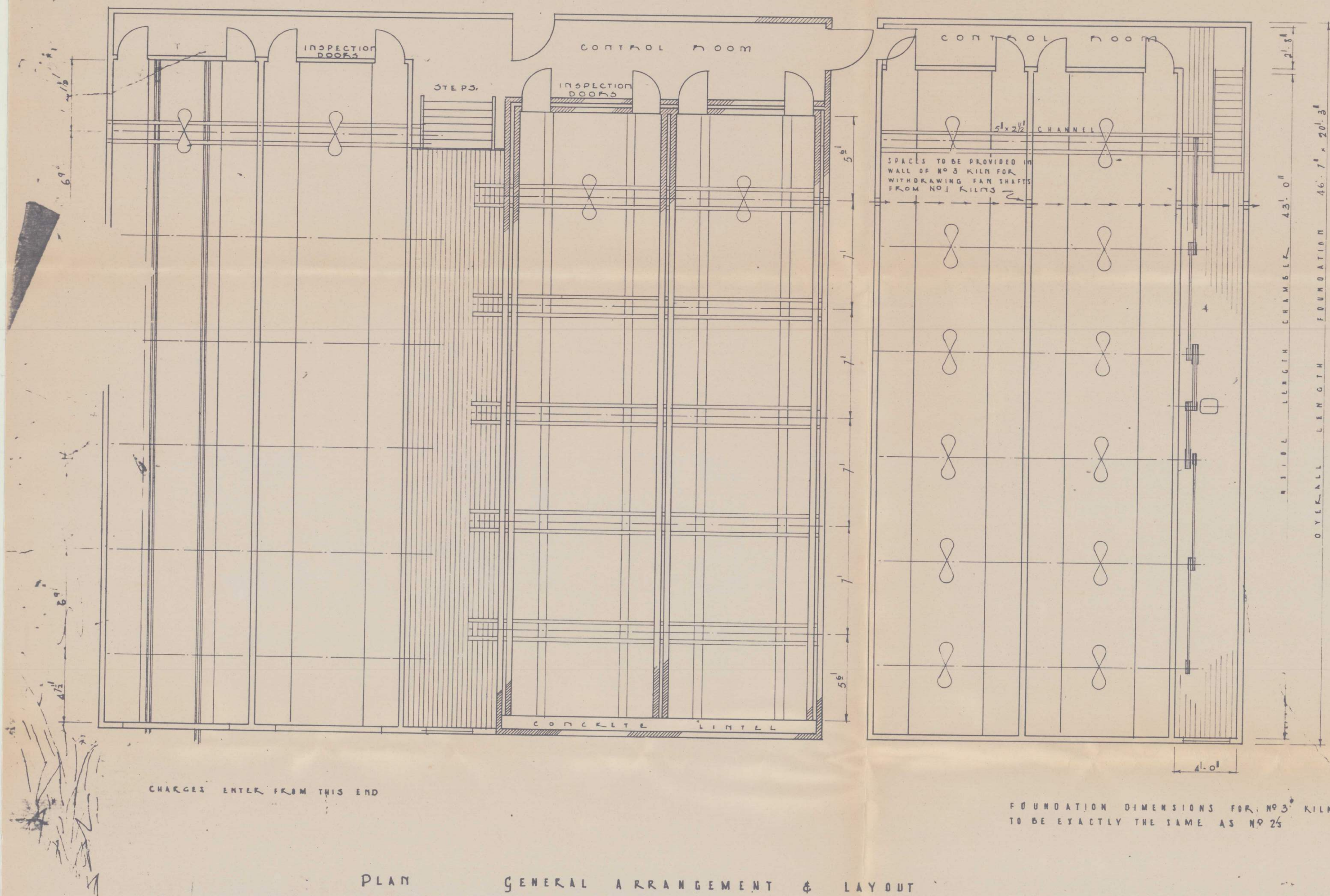
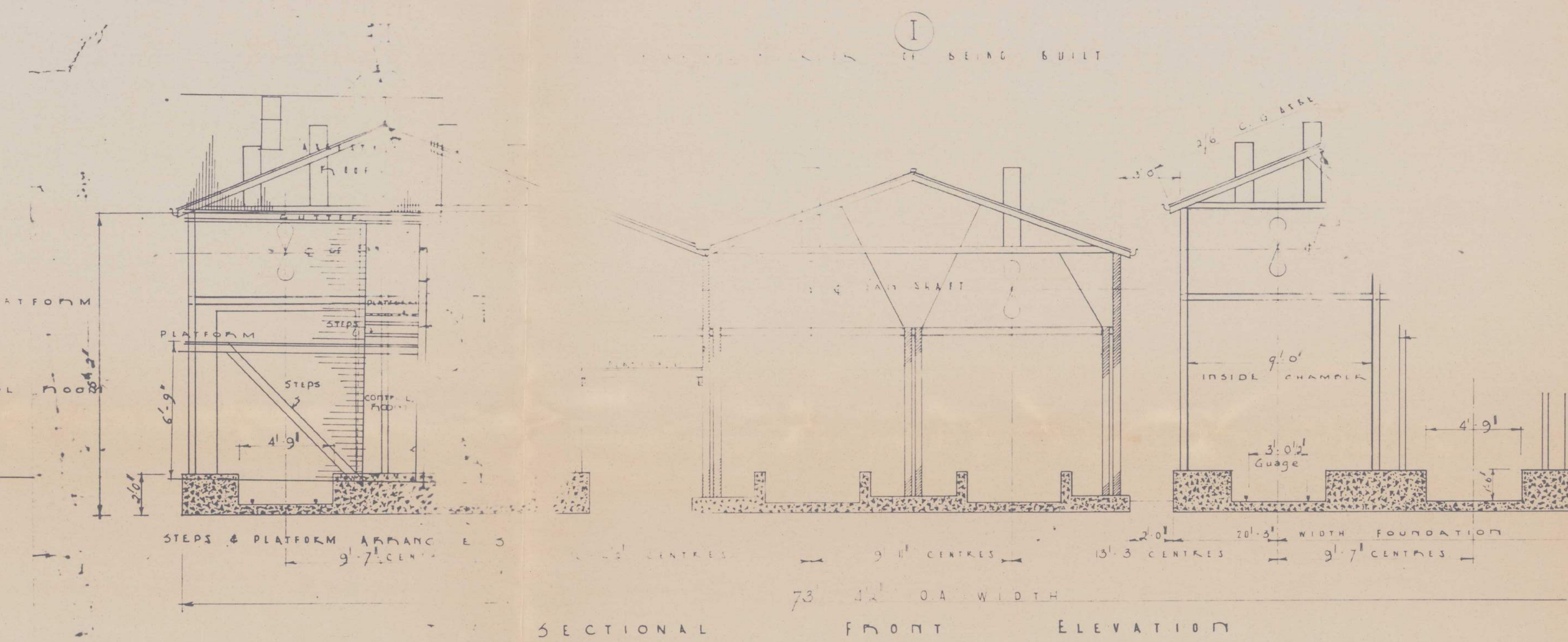
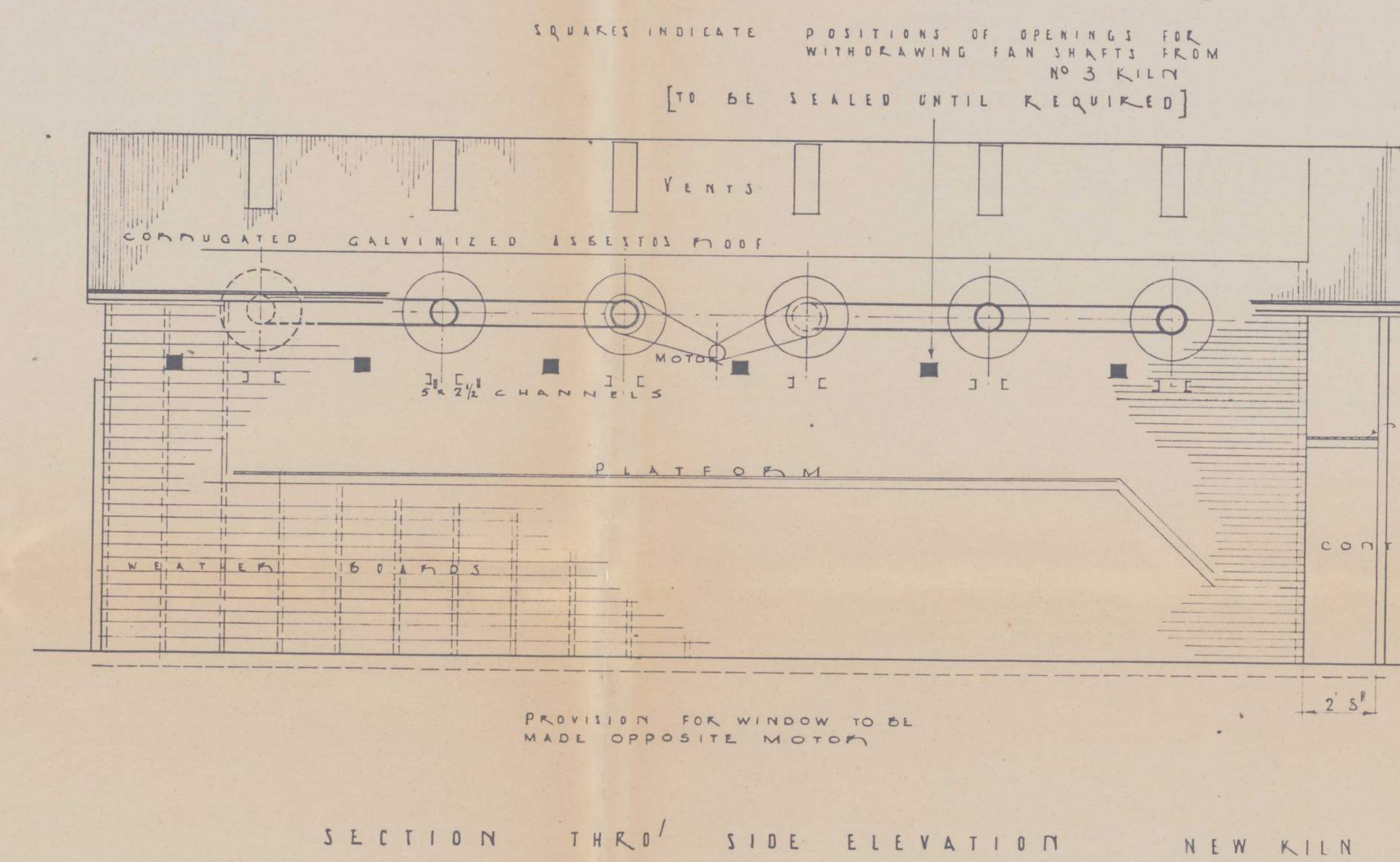
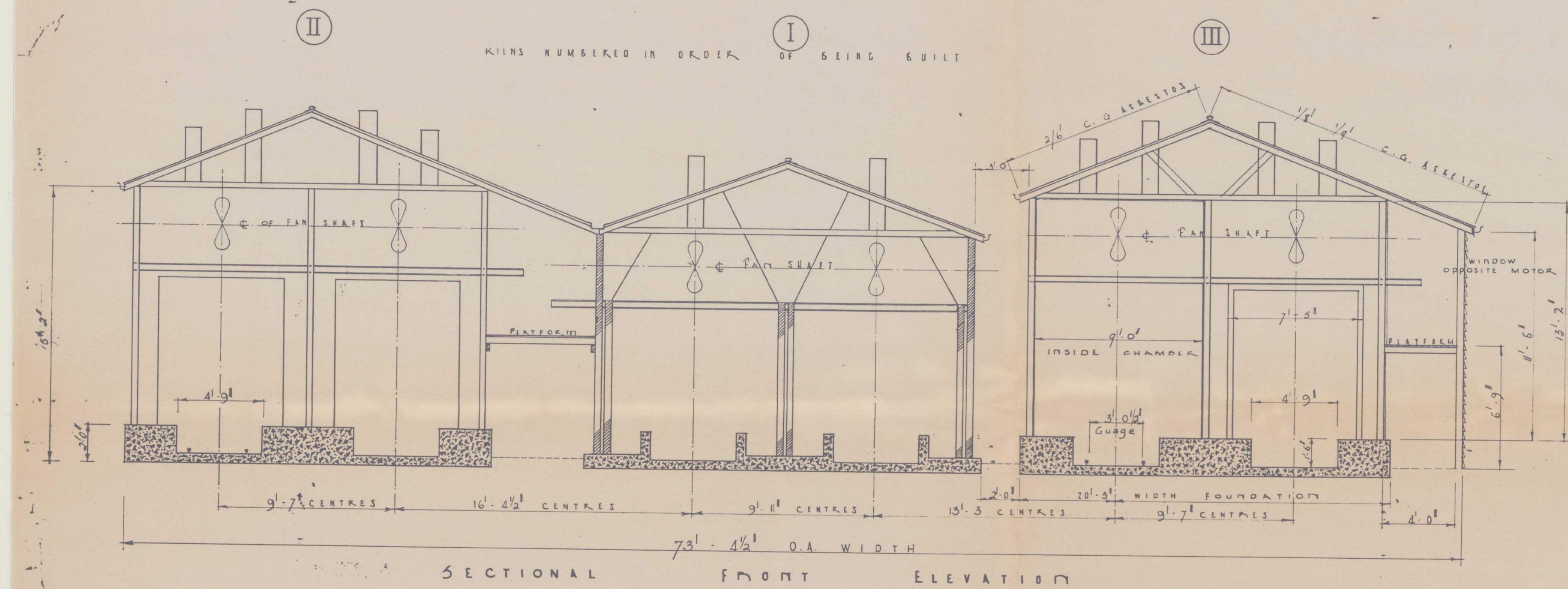
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|----|-----------------------------------------------------------------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 1845 Date of Construction of steam timber mill uncertain. Pit sawn timber exported to London in 1845. | 18 | 1896 Further two mills established at Denmark by Millers Karri and Jarrah Forests Ltd. These mills shut down in 1904. |
| 2 | 1860 Quindalup sawmill, 12 miles from Busselton built by Messrs McGibbon and Yelverton about 1860. | 19 | 1895 Mill established at Yarloop by Millers. Closed in 1901 |
| 3 | 1872 Jarrahdale mills opened 1872. | 20 | 1902 North Dandalup mill established by Whittakers in 1902. |
| 4 | 1874 Mason & Bird built a steam sawmill at Gooseberry Hill in 1874. | 21 | 1904 Mills established at Nanga Brook by Millers. |
| 5 | 1881 J Graves built a sawmill in Murray Street Perth in 1881. | 22 | 1904 Lion mill established by Bunnings in Helena Valley. |
| 6 | 1882 Sawmill at Mount Helena by J W Wright, E Keane and A White. | 23 | 1905 Bunnings took over a mill at Argyle on the Donnybrook rail line. Mill at Boyanup opened by Teasdale Smith. Mill at Donnybrook opened by George Baxter. Lyalls mill near Collie taken over by Bunnings in 1905. Mill at Mount Helena taken over. Muja mill established by Bunnings. Date unknown. |
| 7 | 1882 Attempt to establish a mill at Waverley in 1882-3 by Mr M C Davies. | 24 | 1905 Buckingham established a mill at South Kalamunda. |
| 8 | 1882 White's mill established near Chidlow, later became Lion Mill owned by Honey & Co. | 25 | 1907 Buckingham established a mill at Keysbrook. |
| 9 | 1884 Mills established in 1884 at Torbay by C G and E F Miller. | 26 | 1908 Mills established at Kirrup by Millers. |
| 10 | 1884 Mill established at Coodanup (Karridale Forest) by M C Davies in 1883 closed in 1884. | 27 | 1908 Mill established at Barabup by Karri Company. Closed in 1928. |
| 11 | 1887 Boronup Mill established by M C Davies in 1887 burnt down in 1891, and rebuilt. | 28 | 1910 Mill built at Wuraming by Public Works Department in 1910. |
| 12 | 1892 Jarrahdene mill established by M C Davies in 1892. | 29 | 1911 Buckingham established a mill near Collie. |
| 13 | W.A. Jarrah Co. established mill 5 miles from Busselton, date unknown. | 30 | 1911 Mill established at Holyoake by South West Timber Hewers. |
| 14 | 1890 Mills established by railway contractors E G Lacey, Joe McDowell, Ed Keane, Farnland, White in late 1880's and 90's near Sawyers Valley. | 31 | 1913 Mill established at Ellis Creek by Karri Company. Closed in 1926. |
| 15 | 1890 1890's mills established by Gill McDowell Jarrah Co. at Sawyers Valley, Mahogany Creek, and Waroona. | 32 | 1913 Mill established at Jarnadup (Jardee) by Bunning and Law. |
| 16 | 1890-91 Canning Mills established by Canning Jarrah Co.. | 33 | 1913 Three mills erected at Manjimup including Deanmill and two at Pemberton by State Sawmills. |
| 17 | 1894-95 Mill established at Denmark by Millers Karri and Jarrah Forest Ltd. | 34 | 1926 Equipment shifted from Ellis Creek to a mill at Nannup. |
| | | 35 | 1926 Mill at Yornup established. |
| | | 36 | 1940 Mill established at Nyamup by Bunnings. |
| | | 37 | 1949 Mill established at Donnelly by Bunnings. |
| | | 38 | 1949 Mill established at Northcliffe by Kauri Timber Co. |

- 39 1949 Mill established at Tone River by Bunnings.
- 40 1949 Shannon River Mill established by State Saw Mills.
- 41 1950 Mill established at Northcliffe by Kauri Timber Co.
- 42 1968 Mill established at Collie by Bunnings.
- 43 1978 Dean mill upgraded by Bunnings.



APPENDIX 7.

Kiln Plan 1230



DUNN & CO. PTY. LTD. PERTH
DUNN & CO. PTY. LTD. PERTH
GENERAL ARRANGEMENT & LAYOUT
SCALE 1/4" = 1 FOOT
DRAWN BY L. HENRIKSEN 25.9.57
TRACED BY L. HENRIKSEN 1.10.57

1230

APPENDIX 8.

Consultant's Brief for the Study



HERITAGE
COUNCIL
of Western Australia

CONSULTANT'S BRIEF

CONSERVATION PLAN

for

DONNELLY RIVER MILL

INTRODUCTION

The Heritage Council of Western Australia is commissioning a Conservation Plan for the Donnelly River Mill.

The primary purpose of the Conservation Plan is to clearly set out what is significant in the place, and therefore what policies are appropriate to enable that significance to be retained in its future use and development.

The study area is to include the Mill buildings, machinery and other contents within the perimeter of the security fence.

The work is to be carried out generally in accordance with the principles and guidelines of *The Conservation Plan*, James Semple Kerr, (National Trust of NSW, 1990). Accordingly, the report is to be divided into two parts: the assessment of cultural significance and the conservation policy.

Explanatory notes to the guidelines are set out in the brief. These are based on the *Guidelines for the Preparation of Conservation Plans; Australian Lightstations*, March 1992, prepared by Australian Construction Services.

ASSESSMENT OF CULTURAL SIGNIFICANCE

The assessment should encapsulate the inherent significance of the place in a *statement of significance*, which flows logically from a critical evaluation of documentary and physical evidence.

CONSERVATION POLICY

The conservation policy is to be prepared in accordance with the Guidelines to the *Burra Charter: Conservation Policy*, and is to address each of the issues listed in part 2 of that document.

Prior to formulating policy recommendations and implementation proposals, it is essential to consider and clearly define any influences, constraints and opportunities that flow from the significance of the place, or from outside factors.

REPORT

The report is to be in A4 format, though A3 drawings may be incorporated if necessary.

Four copies of the report are to be provided to the Heritage Council; one must be of archival quality.

The structure of the report is to be as follows:

Title page with names of authors and date

Table of contents, with page or paragraph numbers

Part I ASSESSMENT OF CULTURAL SIGNIFICANCE

1.0 Introduction

- 1.1 The brief
- 1.2 Definition of the property
- 1.3 Current situation
- 1.4 Other issues

2.0 Analysis of Cultural Heritage Significance

- 2.1 Documentary Evidence
- 2.2 Physical Evidence
- 2.3 Discussion of significance and Comparison

3.0 Statement of Significance

- 3.1 Statement
- 3.2 Areas for Further Research

Part II THE CONSERVATION POLICY

4.0 Constraints and Opportunities

- 4.1 Inherent Constraints
- 4.2 User Requirements
- 4.3 Interpretative Requirements
- 4.4 Statutory Requirements (Non - Heritage)
- 4.5 Other
- 4.6 Opportunities

5.0 Policy Statement

- 5.1 Heritage listings
- 5.2 Conservation Procedures
- 5.3 Policy Recommendations

6.0 Implementation

- 6.1 Statutory Obligations (Heritage)
- 6.2 Essential Maintenance
- 6.3 Management Guidelines

7.0 References (If not in footnotes)

8.0 Bibliography

9.0 Appendices

GUIDELINES ON EACH SECTION OF THE REPORT

1.0 Introduction

This section should contain all the summary information which allows the reader to understand the reason for the report, the property under consideration, and the approach taken.

Illustrations should include location plan (s), general plan (s) of the workshops with the components of the site annotated, title drawing and air photos where applicable.

1.1 The brief

Include a copy of the brief, and details of when site inspection/s took place.

1.2 Definition of the Site

Describe the location and extent of the property and include an Australian Map Grid reference.

Define the components of the site and the building numbering system. The primary buildings should be numbered 1, 2, 3 etc and subsidiary structures directly associated with the primary buildings should be numbered 2a, 3b, and so on. Potentially significant items of plant, contained within or directly associated with the primary buildings should be recorded 1(i), 1(ii), 5(iii), etc.

Precincts of closely related buildings should be identified (the relationship may be functional, geographic or stylistic).

All buildings should be noted.

1.3 Current Situation

Outline of past and current use of the workshops, and any plans for its future.

1.4 Other Issues

Use this section to outline any issues which are critical to the understanding of the report but which are not covered above, such as the extent to which the Conservation Plan addressed natural or aboriginal elements and the methodology adopted for the report.

2.0 Analysis of Cultural Heritage Significance

In this section evidence is presented and evaluated leading to the Statement of Significance.

2.1 Documentary Evidence.

Evidence from primary and secondary sources is presented on the history of the development of the place, with emphasis on the components and aspects which make the place significant. The evidence should be compiled in chronological order.

This section should concentrate on the presentation of evidence and avoid critical assessment of the implications of the evidence in the context of the significance of the place. Such a level of discussion or interpretation is more appropriately undertaken in 2.3, Discussion and Comparison.

All sources of documentary evidence should be properly cited.

Illustrations, plans and photographs (with sources and captions) which support the historical summary, elucidate points made, and generally indicate the depth of the research undertaken, should be contained at the end of this section.

2.2 Physical Evidence

The aim of this section is to provide a complete description of the fabric of all the cultural elements which make up the place at the time of the survey. This should take the form of description for general topics and lesser buildings, and more detailed schedules for the major buildings and features. The recording of physical evidence moves from the general, such as the overall workshop, to the specific, such as precincts, individual buildings and features.

A general description of the structural adequacy of each building should be provided.

Describe all plant, furniture, equipment and artworks with heritage potential. List all items in relevant categories.

As for documentary evidence, discussion of the implications of the physical evidence should be kept for 2.3, Discussion and Comparison.

2.3 Discussion and Comparison

This section takes the documentary and physical evidence, analysing elements, arguing cases for significance, and drawing conclusions. It is important to avoid a restatement of facts contained in the documentary evidence. Instead there should be a process of analysis and explanation of the importance of those facts.

The analysis should be applied to the place in general and to its component parts.

Historical - Discussion should take into account the milieu and process which produced the place and particular persons and/or events for which the place or its location may be of particular significance.

Fabric - Discussion should encompass site/landscaping, design, construction/technology, interior, integrity/alteration, and comparative discussion. The last topic is a vitally important topic in that it establishes the way in which the place and its components can be compared with other relevant examples.

Environs - Discussion should encompass the landscape/streetscape qualities of the place and its component elements as well as their landmark value.

Other (as necessary)

3.0 Statement of Cultural Significance

The Statement of Cultural Significance is the key to the whole document. It must follow logically from the assessment of cultural significance and it must form the basis of the policy and implementation.

The statement should be succinct and unambiguous, with each element able to stand and make sense on its own. It should be based on the evidence presented in 2.0.

3.1 Statement

The Statement of Cultural Significance should address the aspects discussed in sub-section 2.3. It must clearly address whether the place is significant, why it is significant and how it is significant.

It is useful to use terms such as high significance, moderate significance, low significance, and intrusive, to indicate levels of significance.

High Significance - Items of a high level of significance would warrant inclusion on any register of places of significance.

Moderate Significance - Moderate significance is the threshold for entry onto the Heritage Council's (WA) *Register of Heritage Places*, the Australian Heritage Commission's *Register of The National Estate*, or the National Trust of Australia (WA) *Classified List*.

Low Significance - Items of low significance include most of the additions and alterations made to accommodate changing requirements. They tend to be expedient and ephemeral and their impact on the significance of the building ranges from neutral to moderately intrusive.

Intrusive - In addition there are those intrusive items which in their present form have a direct adverse effect on the character of the place.

3.2 Areas for Further Research

Identify areas of potential importance which were beyond the resources or brief of this report, particularly if the results of further research might have the potential for modification of the statement of significance.

4.0 Constraints and Opportunities

The cultural significance of the site and its buildings, the operational requirements of the owners and/or lessees, the statutory requirements of responsible authorities, and the physical situation of the property, all impose constraints on the way in which the place can be used.

The constraints and opportunities (outlined in sections 4.1 to 4.6), which apply to each building, structure, and associated equipment, or furnishings should be specified.

4.1 Inherent Constraints (from Statement of Significance)

Depending on the levels of significance identified in 3.0, Statement of Cultural Significance, there should be an immediate recognition of the fabric of the Place which requires conservation.

4.2 User Requirements

Any constraints on the treatment of the property should be identified.

In addition, the issues of possible compatible uses (as defined in the *Burra Charter*) should be addressed here. The level of discussion may vary from general to specific uses.

4.3 Interpretative Requirements

The degree to which it is necessary or desirable to interpret the property to visitors or users should be discussed. This is the opportunity to highlight the interpretative potential of the place.

4.4 Statutory Requirements (Non - Heritage)

The degree to which statutory regulation such as building codes, health and safety etc., affect the conservation considerations at the property should be addressed in general terms.

4.5 Other

These are other constraints on the use of the property, such as access, remoteness, or environmental conditions which should be addressed.

4.6 Opportunities

This is where the positive aspects of heritage value and significance are expressed as opportunities in themselves. It should include statements about such elements of the fabric which are not of importance. It should generally address areas of potential alteration or development.

5.0 Policy Statement

The recommendations in this section are intended to set the general philosophical framework for the more detailed recommendations contained in Section 5.3.

5.1 Heritage Listings

A record of all heritage listings for the place, or any of its components, should be provided. Describe exactly what is registered, reference numbers, date of assessment, and quote verbatim from the statements of significance or citations.

5.1 Conservation Procedures

It is important to state the philosophical basis for conservation practices to be undertaken at the property. Definitions of the following terms should be extracted from the *Burra Charter*:

- . Conservation
- . Maintenance
- . Preservation
- . Restoration
- . Reconstruction
- . Adaptation

5.3 Policy recommendations

Specific policy recommendations should be made for all buildings, structures, items of equipment and furnishings. The recommendations should move from the general to the specific and as far as possible use terminology defined in the *Burra Charter*. This section may require illustrations.

6.0 Implementation

6.1 Statutory Heritage Obligations

Obligations of owners under Commonwealth, State and, local heritage legislation should be outlined. These are statements of fact but may include recommendations where further listings or protection may be necessary.

6.2 Essential Maintenance

Refer to all those items which require immediate remedial work or special monitoring to prevent significant deterioration of the fabric over the next 12 months.

6.3 Management Guidelines

This section is crucial to the plan as it contains the specific guidelines for the future management and development of the property. Guidelines should be prepared for the short and long term, including interpretation and conservation of selected items, structures and buildings as well as precincts (if applicable), and new development.

The guidelines must:

- . be consistent with the policy recommendations identified in 5.0:
- . take into account constraints and opportunities identified in 4.0:
- . be based upon the significance established in 3.0.

The guidelines should not focus on any particular development but instead should provide a framework within which informed decisions can be made by owners, tenants or their representatives. The guidelines should be valid for many years and for any changes in ownership or control.

The guidelines are not intended to provide specific solutions but instead provides the direction to achieve those solutions.

It should be emphasised that all work should be undertaken with professional conservation input.

The section should be accompanied, where appropriate, by diagrams indicating areas available for development, and the nature and extent of permissible works on important buildings.

7.0 References

Quotations and other references should be properly referenced and the sources cited, preferably in footnotes on the same page as the relevant text, or in this section (7.0) of the body of the report.

For example:

1. *West Australian Mining, Building and Engineering Journal*, 25 November 1911, p.19
2. Ibid (Where the quote is the same as above)
3. Uren, M. *The City of Melville: From Bushland to expanding metropolis*, Melville City Council, 1975, p.2
4. *Fremantle Gazette*, 17 February 1978, p.1
5. *Wise's Post Office Directory*, 1920, p.19 and 1921, p.91
6. Op.cit, Uren, M. 1975 (Where the source has been previously cited)
7. *Votes & Proceedings*, 1927, Vol2. Annual Report for the Department of Public Works and Labour.
8. Bell, A. Maston. 'Transcript of an interview about Albany Bell, Pineapple Estate, Chicken Hatchery, World War 1', conducted and recorded by C. Jefferey, Battey Library, OH1568, p.7.
9. Supreme Court - Criminal Sittings. 'Pitman and Walsh' Acc3473, File 5620, 5621/1926, Battey Library. (This is a primary source: enough detail required so the information can be traced at a later date.)

8.0 Bibliography

This section should list, in alphabetical order, all the sources of information referred to in the report.

For example:

- . Hogan, Janet. *Building Queensland's Heritage*. Richmond, Victoria: Richmond Hill Press, 1978.

9.0 Appendices

Any information which may be critical to an understanding of the report or its preparation but which does not fall within this outline of a Conservation Plan should be included in appendices in this section. Appendices could include such things as:

- . Acknowledgments
- . *Burra Charter*
- . Section 30 of the *Australian Heritage Commission Act 1975*, and Sections 11 & 78 of *The Heritage of Western Australia Act, 1990*.
- . Other (as necessary)

ARCHIVAL STANDARDS

At least one copy of the report is to be prepared to archival standards for State and Heritage Council records. The standards to be followed are:

Photographs: New or re-photographed photographs are to be genuine black and white only (not colour printed black and white); photographs are to be attached by archival tape or glue (ie - wheat starch adhesive, neutral adhesive, gummed linen tape).

Negatives: Negatives of any new photographs should also be provided.

Slides: Colour transparencies/slides should be provided in addition to black and white photographs. Slides are to be labelled numerically, and packaged in archival quality slide pockets.
An index describing each slide should be attached.
Colour images required in reports are to be colour copied onto suitable archival paper.

Paper: Acid free, archival quality (ie Reflex Archival etc.).

Packaging: Acid free, lignan free, buffered (e.g. PermaDur and Mylar).

Fasteners: Non-metal; paper clips of archival quality plastic.

Binding: The archival copy is to be heat bound with a white spine tape; the other copies should be bound with plastic spirals. The front cover should be protected with a clear acetate film.

TIMETABLE

A draft copy of the Conservation Plan is to be provided for comment within 6 weeks of appointment, and the final copies within 2 weeks of receipt of comments on the draft.

COPYRIGHT AND CONFIDENTIALITY

All copyright of new records shall rest with the Heritage Council of Western Australia, including films, drawings, photographs, negatives, and transparencies.

LIAISON

The consultant will liaise with Mr G. MacGill at the Heritage Council of Western Australia, 292 Hay Street, Perth WA 6004; Tel. 09 221 4177; Facs 09 221 4151

On site liaison will be with Mr Ray Moss of Donnelly River Holiday Village, C/- Community Mail Bag via Manjimup WA 6258; Tel. 097 72 1292; Facs 097 72 1309

APPENDIX 9.

List of Plans held in Bunnings Engineering Archives, Manjimup

APPENDIX 9

List of Plans held in Bunnings Engineering Archives at Manjimup.

Size B.2 Plans

BD	1097	B	-1956	Foundations Boiler No. 2795
	9224		-1973	Foundations Boiler No. 2795
	8898		-1971	Sizing Equipment
	8899		-1971	Sizing Equipment
	6997		-1969	Base Plate for Ruston Engine No. 265588 and Alternator No. 121 4988.
	6536		-1969	^{3/4} Bushel Bunning Apple Crate.
	6545		-1969	^{3/4} Bushel Bunning Apple Crate.
	6557		-1969	^{3/4} Bushel Bunning Apple Crate.
	6559		-1969	^{3/4} Bushel Bunning Apple Crate.
	6499		-1968	No. 1 Sawdust Bunning Babcock and Wilcox Boiler
	6407B		-1968	Firewood Docker
	5720		-1966	Babcock and Wilcox Boiler No. 7207 Sawdust Chute.
	5688		-1960	Steam Expansion Gland
	5597		-1966	Mill Boiler Suspension Structure
	5596		-1966	Brickwork for No. 1 Sawdust Burner
	5120		-1964	Log Trolley Winch
	5123		-1964	Log Trolley Winch
	860		-1954	Kiln Extension
	1144		-1955	Kiln Extension
	1147		-1955	Kiln Extension
	1230		-1957	Kiln Extension

Size C Medium Plans

	858		-1954	Kiln Foundations
	1097C		-1956	Chimney Base
	5215		-1965	Tungsten Tip Saw Grinder
	5213/1		-1965	Tungsten Tip Saw Grinder
	5681		-1968	Boiler 7207 - Brick Sequence
	5640		-1966	Chimney Stack & flue - Boiler 7207
	5609/1		-1966	Plate, Boiler 7207
	6406C		-1968	Firewood Docker
	6389C		-1968	Gauge
	7824C		-1961	Levels for PC Mill
	7863		-1967	Site for Waste Burner
	C.9898		-1973	Mill Building Roof Trusses
	C.9554		-1972	Top Saw Spindle
	C.8913		-1972	Log Carriage Motor Bracket
	C.8908		-1972	Log Carriage Control Bracket
	C.7913		-1974	Cutting Area
	C.7868			Mill House toilets
	7229		-1976	^{3/4} Bushel "BB" Apple Case
	C.7000			Ruston Generator No. 265588

Size C Medium Plans

	C.6537		-1969	^{3/4} Bushel Apple Case
	C.6546		-1969	^{3/4} Bushel Apple Case
	C.6547		-1969	^{3/4} Bushel Apple Case
	C.6548		-1969	^{3/4} Bushel Apple Case
	C.6482		-1968	Planning Shed Depot Lintel
	5745		-1966	Boiler 7207 Sawdust Trough
	5744		-1966	Boiler 7207 Sawdust Conveyor Motor Base
	5742		-1966	Boiler 7207 Sawdust Conveyor Motor Base
	5726		-1966	Boiler 7207 Sawdust Conveyor Motor Base
	5420		-1965	Kiln Steam Head
	5308		-1965	Kiln Ventilation
	5266		-1965	Tungsten Tip Saw Sharpener
	5236		-1965	Fruit Case Cleating Machine
	881C		-1954	Kiln Heating Coils
	884			Pump For Kiln Lifting Trolley

Size D Plans (Small)

	6777D		-1964	Log Trolley Winch
	6778D		-1965	Boiler Stanchion
	6780		-1957	New Kiln Control Room
	6538-6544		-1969	^{3/4} Bushel Fruit Case
	6551D		-1969	^{3/4} Bushel Fruit Case
	6556		-1969	Log Carriage Clamp
	5384		-1965	Extension Sheave for Robey Engine
	5385		-1965	Extension Sleeve for Robey Engine
	5366		-1965	Steam Pipe to Bellis Newcomb Engine 5526
	5320		-1965	Kiln for Shaft
	5316		-1965	Kiln Inspection Door
	5317		-1965	Robinson ML/T Infield Roller
	5309		-1965	Kiln Heating Coil Bracket
	5310		-1965	Kiln Fan Motor Bracket
	5311		-1965	Kiln Inspection Door
	5213/7		-1965	Grinder Cutter
	5213/6		-1965	Grinder Cutter
	5204		-1965	Boiler Feed Water Tank

APPENDIX 10.

Bunnings (Donnelly) Pty Ltd letter dated 29th September 1980

BUNNINGS (DONNELLY) PTY. LTD.

Registered Office:

255 Adelaide Terrace, Perth, Western Australia, 6000

Box R 1276, G.P.O. Perth, Western Australia, 6001

Telex: AA 92151 Telegraphic Address: 'Bunnings Perth'

Telephone: (09) 325 2111

29th September, 1980.

Ref: MLB:LP/5411/50

Under Secretary for Lands,
Department of Lands & Surveys,
Cathedral Avenue,
PERTH, W.A., 6000.

Dear Sir

RE: WHEATLEY TOWN SITE - DONNELLY RIVER MILL

Thank you for your letter dated 11th July, 1980 containing the conditions set out in a letter to your department from the Conservator of Forests.

We have carefully considered all aspects of our continuing involvement in the Donnelly River area and have decided that it would not be in our Company's interest to proceed with our request to lease of the Wheatley Townsite area.

Our Company has offered to donate the sawmill and to loan the mill steam engine to the Western Australian Department of Tourism to assist them with their aim of developing the area as an historic tourist attraction.

Thank you for your assistance in this matter.

Yours faithfully,



A.D. BRADSHAW,
Manager - Administration & Finance.

ADB:LNB

APPENDIX 11.

Report by the then Department of Tourism concerning the future of the mill
following closure

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2. Background
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5. Nearby attractions
6. Stage development programme
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- 8/9. Stage two - Caravan park - Camping area - Recreational facilities
10. Stage Three - Inter-related crafts - Sleeper cutting - shingle splitting - saddlery and leatherworking - woodturning
11. Stage four - Caravan park - chalets - bungalows - motel/tavern.
- 12/14. Associated Organisations
15. Recommendation

Acknowledgements

The Department of Tourism gratefully acknowledges the help and assistance extended by the following organisations and departments in the preparatory negotiations and discussions related to the proposed development of the mill site.

BUNNING BROS. PTY. LTD.

COUNTRY TOURIST ORGANISATIONS

DEPARTMENT FOR YOUTH SPORT & RECREATION

FOREST PRODUCTS ASSOCIATION

FORESTS DEPARTMENT

LANDS & SURVEYS DEPARTMENT

PRIVATE DEVELOPERS

PUBLIC HEALTH DEPARTMENT

SHIRE OF BRIDGETOWN/GREENBUSHES

SHIRE OF MANJIMUP

SHIRE OF NANNUP

STATE HOUSING COMMISSION

W.A. INSTITUTE OF TECHNOLOGY

YOUTH HOSTELS ASSOCIATION

Background

The Timber Mill at Donnelly River, owned by Bunning Bros. Pty. Ltd. ceased any major operation in July 1978.

Some of the residents previously employed at Donnelly River Mill although now employed at other company mills in the district are still residing at Donnelly River townsite.

Over the years similar mill operations have closed down and efforts to retain part of the complexes for tourist purposes were unsuccessful.

Several approaches were made regarding the alternative utilisation of the facilities at Donnelly River Mill when the closure became known.

The main aspects of the proposals related to the retention and restoration of the timber mill as a tourist attraction and the utilisation of existing houses not occupied by Bunning Bros. employees, as cottage accommodation for tourists.

In the interests of establishing another attraction in the Region and developing the area as a tourist complex the Department of Tourism initiated negotiations with the respective organisations and took steps to try to bring the project into reality. Efforts were made to inform the controlling authorities of the concept and to determine what assistance might be available from the various sources.

Most organisations have denoted an interest in participating in the project however, no firm commitments have been received pending a detailed developmental programme and feasibility study being available.

The site is considered to be a definite area of interest, with considerable potential to be developed as a tourist complex and the existing facilities should therefore be retained wherever possible and incorporated into the overall development of the Donnelly River Milltown.

Introduction

The contents of this report detail a development proposal associated with the closure of the timber mill operations at Donnelly River Mill.

The scheme involves the retention of the timber mill and its ultimate restoration and conversion into a museum type structure depicting the present day and historical aspects of the timber industry in the region.

It is proposed that the adjacent recreation facilities and community services will be retained for visitor usage and portions of the existing housing will be utilised as holiday accommodation.

The overall development of the complex is anticipated to be undertaken as part of a stage development programme, with emphasis initially being placed on the restoration of the mill as an attractive focal point and drawcard for the milltown.

In conjunction with these works will be a maintenance and upgrading schedule for the existing vacated houses to ensure that accommodation at the site is available in the immediate future.

Development of support facilities and associated attractions and activities will follow, again with the emphasis being placed on the complex becoming operational as soon as possible.

The revenue earning capacity in the early stages of development will have a considerable bearing on the progression of future developmental proposals and the ultimate completion of the total project.

Significance of the Site

The project will be developed at the Donnelly River Mill site and adjacent land gazetted as the "Wheatley" townsite.

The complex is located 307 Kms by road from Perth via South - Western Highway and the Bridgetown/Nannup Road, and approximately 13 Kms south of the Bridgetown/Nannup Road.

Apart from the natural attributes of this particular location for such a scheme, the area and the timber industry boasts a most interesting historical background and a vital link with the early settlement of the State.

The Donnelly River Milltown complex is ideally located in close proximity to other major attractions in the region. It is the geographical centre of the South West corner of Western Australia and is situated on the much publicised "Leeuwin Way" tourist route.

Furthermore, it is conveniently located as an ideal stopover point for several alternative and recognised tourist routes throughout the South West region.

It also has tremendous appeal as a holiday "destination", away from the hustle and bustle of the more highly developed and populated major tourist centres.

Nearby Attractions

The South West corner of Western Australia is steeped in history and has many rare attractions.

One eighty kilometre stretch features several of the most beautiful caves in the hemisphere, including many unique formations.

The forests of "the Kingdom of Karri" are awe inspiring as some of these trees soar up to sixty-one metres before reaching the first limb. This thickly wooded country also includes features of jarrah, wandoo and tinglewood, and timber from the area is world famous.

Other nearby attractions include :-

Coastal Scenery

Surfing

Fishing

Aquatic Activities

Historical Exhibitions and Museums

Festivals

Vineyards

Resort Areas

Steam Trains

Wildlife Sanctuaries

and of course not forgetting the ever popular wildflowers which abound in this region.

Stage Development Programme

The present proposal includes the progressive development, of the Donnelly River Mill site, on a stage development basis and yet allowing a degree of flexibility to allow earlier establishment of some facilities and amenities should financial resources become available earlier than anticipated.

The following details outline the priority works to be undertaken initially, followed by back up tourist plant, facilities and attractions associated with the overall development of the tourist complex.

Stage OneTimber Mill

A restoration programme for the timber mill will be undertaken to ensure that the equipment is maintained and developed to become a focal attraction to the area.

The mill which will contain some working aspects, demonstrations and displays will therefore be educational, entertaining and historically authentic. At the same time it will allow the visitor to experience some of the historical and present day features of the timber industry. Visitors will also experience some of the hardships, endeavours and achievements of the people involved in the saw milling and timber industry in Western Australia.

Utilisation of Existing Housing

The existing housing, not being utilised by Bunning Bros. employees, is intended to be utilised for low cost accommodation.

Considerable maintenance on the majority of buildings will be required before they become a commercial proposition. There is also a need to supply appropriate furniture and household commodities to bring the cottages up to an adequate standard.

Signposting

Suitable signposting and information boards will be erected around the complex to facilitate ease of movement of visitors throughout the milltown.

Directional signs will also be installed at strategic locations to ensure that visitors are familiar with the amenities, recreational facilities and community services available for their use.

Signposting directing people to the nearby attractions and facilities will also be incorporated in this section of the programme.

Displays/Demonstrations

Apart from the timber mill other appropriate displays and demonstrations will be featured as part of the total experience of a visitation to the complex.

Stage Two

Items included in this segment of development will be related to additional accommodation and recreational facilities.

Caravan Park

It is proposed to establish a medium sized caravan park on the location previously occupied by the single men's huts which have now been sold, demolished or removed.

The area is conveniently located to the central development of the mill and community services, yet sufficiently divorced from the cottages so as not to aesthetically conflict with the attractiveness of the area.

The additional advantage of the site selected is the presence of the old ablution block, which was previously used by the single men.

The building is somewhat in a state of disrepair, however, with some expenditure on maintenance and upgraded plumbing equipment a reasonable standard could facilitate utilisation until such time as a new ablution block was built in subsequent stages of development.

There are also economies associated with this approach to future development. The site is elevated and terraced with access tracks through the area.

Furthermore, there is adequate provision for further expansion of the park at a later date.

Camping Area

A suitable area within the proposed caravan park will be set aside to cater for the requirements of campers visiting Donnelly River.

The ablution facilities at the caravan park could be utilised and the only additional amenities would be the provision of cooking and washing up shelter sheds, which would be established with a minimal expenditure.

Recreational Facilities

A tremendous potential exists for the development of recreational facilities within the complex and the surrounding forestry areas.

Existing facilities include :-

- * Sports and recreational ground capable of catering for most sporting activities requiring the use of an oval, e.g. football, cricket, hockey, soccer, baseball, athletics etc.

- * A cricket pitch is included on the sports ground.
- * Swimming in the dam section of the Donnelly River.
- * Walk trails along the nearby "Bibbulmun Track".

As part of stage two of the development, existing forestry tracks and additional areas will be surveyed and opened up for a variety of recreational pursuits. This could further adequately provide the basis for an orienteering course in conjunction with the "Bibbulmun Track".

Other features to be incorporated in the complex include :-

- * Canoe hire service
- * Pony rides
- * Bicycle hire
- * Horse and sulky rides
- * Barbecue facilities at strategic locations and possibly with assistance from the Forests Department in locations under its control.

Additional amenities would be assessed on demand and the viability of such services.

Care will need to be exercised and negotiations held with the Forests Department representatives and other controlling authorities regarding restricted areas of access particularly relates to the current "die back" problem and the periodic utilisation of some of the tracks for logging operations.

Stage Three

Concentration in this segment of development will be on the establishment of inter-related crafts to provide a back up facility and attraction to the timber mill.

Such centres will not only contribute to the overall attraction of the complex but will provide an area where skilled craftspeople may be watched and selected wares bought from either the General Store or direct from the craftsperson.

Some of the typical crafts to be incorporated will be :-

- * Sleeper cutting - in the early days of the industry the rapidly expanding railways system needed an increasing quantity of sleepers. Billets of timber are "squared" using a chopping axe and broad axe.
- * Shingle splitting - the shingle was a common method of roofing prior to the introduction of corrugated iron. Shingles are hand split using a froe and maul. With current emphasis being placed on our heritage, a lucrative market exists for shingles utilised in restoration works on historical buildings throughout the State.
- * Saddlery and leatherworking - the skills of the saddler and leatherworker were essential, and as well as making driving belts for the sawmills often acted as the local bootmaker. People working the logging teams were however, the main customers.
- * Woodturning - has been a specialised craft for hundreds of years. Lathes are capable of turning a small wooden button or a large verandah post. Considerable potential exists with this craft in not only providing an attraction and commercial outlet for the goods but would be capable of manufacturing a large quantity and variety of the materials and furniture contained in the cottages and other buildings but also some of the maintenance materials required. Resultant benefits would be considerable when related to the estimated maintenance budget.
- * Blacksmithing - apart from forging the equipment in the logging and milling industry the blacksmith of yesteryear was also required to shoe horses.
- * Miscellaneous arts and crafts could also be included in this centre as well as pottery and the like. A large number of craftspeople are located in the South West region and would welcome a developed site and recognised outlet for their wares.

Stage Four

Providing the complex is developed in line with previous plans outlined in this programme and receives the anticipated support and utilisation of facilities and services there could be a need to expand existing accommodation facilities. It is therefore planned to develop the following accommodation.

Caravan Park

Rebuild the existing renovated ablution block to better cater for present capacity and provide additional facilities for the expansion of the park to be undertaken at the same time.

Chalets

Should the Forests Department houses not be made available for inclusion in the complex, or if demand exceeds supply provision of additional chalets will be essential. A couple of alternative sites have been selected which would complement the present chalets.

Bungalows

This style of accommodation is proving increasingly popular particularly if catering for the special interest groups, school tours and similar parties.

A series of bungalows in close proximity to the guest house would allow the dining room to cater for meal requirements.

Motel/Tavern

Long term development of these facilities is a strong possibility. The economic viability of such a proposal and the availability of adequate financial resources would however, have a bearing on the ultimate component of the establishment.

Should the development of a motel/tavern proceed it is anticipated that although the style of accommodation will be modern internally and functional the architecture of the building will be designed to blend in with the present day complex.

Organisations associated with the tourist development of Donnelly River Timber Mill.

Western Australian Department of Tourism

The Department of Tourism is acting as the co-ordinating body in this project.

The involvement of all the associated organisations is regarded as essential in order that early development may take place.

A number of discussions have already been held to formulate a working programme for development.

Bunning Bros. Pty. Ltd.

The Donnelly Township is basically a "Bunnings" Town.

The timber mill plus a large proportion of the housing is owned by Bunning Bros. Pty. Ltd.

It is essential that the project receives the full support of that Company, particularly in relation to the restoration work to be undertaken at the mill. The concept to develop Donnelly River Mill as a tourist complex is supported by Bunning Bros. however, details as to the contribution to the project by that company have yet to be finalised.

Forests Department

The Donnelly River Township is situated within a Forest Reserve, with the Forests Department owning a number of cottages on the northern side of Donnelly River. Negotiations have commenced for these cottages to be left to form part of the available tourist accommodation within the complex.

It will be necessary to seek the approval of the Forests Department for utilisation of the surrounding areas for such activities as walk trails, horse riding trails, picnic areas etc.

State Housing Commission

A number of the houses in the township are owned by the State Housing Commission and it will be necessary to reach agreement with that authority for utilisation of this property for tourist accommodation.

There are also a number of lease agreements in existence between the State Housing Commission and Bunning Bros. Pty. Ltd. and there will need to be a clarification of this situation.

Agreement as to the basis on which the housing is to be made available for tourist purposes has yet to be reached.

Lands and Surveys Department

There will be a requirement to alter the gazetted zoning of the land to enable the development of a tourist complex.

At present the township is gazetted for the purposes of the timber mill operation and there is also some uncertainty as to the legal ownership of some of the land on which houses are situated.

Discussions on these matters are taking place between the State Housing Commission, Bunning Bros. Pty. Ltd. and the Department of Tourism.

Nannup Shire Council

The Donnelly River complex is situated within the Shire of Nannup with council rates being paid to that local authority by Bunning Bros. Pty. Ltd.

The Shire of Nannup is a very small shire and while it supports the concept for the development of Donnelly River, its own contribution to the project is expected to be marginal.

However, the overall support and endorsement of the project by the Shire of Nannup is essential.

Bridgetown/Greenbushes Shire Council

The Bridgetown/Greenbushes Shire is historically involved with the early development of Donnelly River Timber Mill. The town of Bridgetown was originally the support town for Donnelly River Mill, with mill supplies being obtained from that source.

Preliminary discussions with officers of the Bridgetown/Greenbushes Shire Council indicate a strong support of the project.

Manjimup Shire Council

In more recent times the town of Manjimup has become the support town for Donnelly River. Manjimup is also historically linked with the development and operation of Donnelly River Mill, with the main regional office of Bunning Bros. Pty. Ltd. being located in that town.

The Shire of Manjimup together with many of the Manjimup townspeople, have been strong proponents of the project.

Department for Youth Sport and Recreation

The Department for Youth Sport and Recreation is already associated with the development of low cost holiday accommodation within forestry areas.

The role of that Department in advising and assisting with the development of recreational facilities at Donnelly River, is considered to be a most important aspect of the project.

Western Australian Institute of Technology

The Western Australian Institute of Technology has been approached to consider undertaking a number of the Donnelly River developmental activities as student projects.

These activities would include the preparation of building plans and designs, site surveys, history writing and other related services.

Recommendation

It is recommended that the Donnelly River Mill site be developed as a tourist complex with the retention and preservation of the timber mill and its equipment as a focal attraction to the area.

The development of recreation and resort facilities incorporating low cost accommodation, utilising existing housing and communal services is favoured.

Other support amenities and additional accommodation plant should be established as part of the overall holiday centre.

Further contact should be made and negotiations held with the respective departments and controlling authorities in an effort to facilitate development by private enterprise and formalise lease agreements for the site, in the interests of establishing such a tourist venture.

APPENDIX 12.

Mill Closure Report Warren & Blackwood Times 5th July 1978

MILL CLOSURE END OF AN ERA AT DONNELLY

DONNELLY RIVER: The end of an era appears the most popular summation of the events at the Donnelly River Mill last Friday.

At 3 pm operation officially ceased at the mill and about 300 past employees, Bunnings' executives and guests gathered for the town's wake. The town, thought by many to be the most picturesque mill settlement in the State, will be kept alive, for a time, by the 25 people who want to continue living there while working elsewhere. The company will soon be providing a bus service to this end.

Donnelly's death will be a slow one with no immediate casualties. All employees have been found jobs at other mills and those who wish to continue living in the town are being given every assistance to do so. Donnelly, near the officially gazetted townsite of Wheatley, commenced operations in January, 1950.

Expansion at Deanmill and the change to a double shift has meant continued employment for 35 men from Donnelly while the balance of the town's workforce of 60 have opted to work at other mills in the South-West. John Scott and Henry Martin were the two men responsible for its planning and construction. On the last day chief engineer Scott listened nostalgically to the thumping of the mill's steam engine.

A skeleton staff will remain in the town, processing and despatching seasoned stocks and continuing logging for Deanmill. "That's the Rolls Royce of steam engines," he said. "We bought it after it had done 25 years work and it's still in perfect order."

Donnelly was one of only two steam driven mills in the State. The other, Tone River, is facing a similar fate.

The mill was built to replace the old mill at Yornup. It was expanded to include a planing shed and kiln drying facilities, employing 120 men at its peak.

The karri timber cut at the mill earned it a reputation as the finest hardwood mill in Australia. It was renowned for its mine guides, mine shaft sets, and heavy construction timber.

In contrast it also had the capacity for producing thousands of fruit packing cases for local use.

The mill's first manager, Roy Britten who retired in 1967, had one thing to say about the closure on Friday — "It's very sad indeed."

Managers to follow Roy were Gordon Moffitt, Barney Ammondale, Eddie Valom and Ken Young, all of whom, with the exception of Mr Ammondale, were present on Friday.

Also at the closure was Deputy Premier Des O'Neil, not to represent the Government but as one of the town's many past identities.

Mr O'Neil was the Donnelly school's second headmaster.

Bunnings' chairman, Mr Charles Bunning, Bob Bunning and Warren MLA Dave Evans were also among the crowd that farewelled the mill.

APPENDIX 13.

Mill town to be used for tourism, reports in the West Australian Newspaper 19th January 1981, Warren & Blackwood Times 21st January 1981

TIMBER TOWN TURNS TO TOURISM

Wheatley, the South-West timber town centred on the Donnelly River mill, is about to begin a new life as a tourist resort.

The town, which lies in picturesque countryside 307km south-west of Perth off South-Western Highway, has been described as an exciting development

project and a unique attraction.

The WA Department of Tourism has advertised for prospective developers to make the town into a tourist complex and has already had a good response.

The town now has about 10 permanent residents.

The State Government has been interested in the town since the timber company, Bunnings, ended its milling operations there in July, 1978.

It was worried that the town, which was originally established in 1948 for the sawmilling industry, would fall into disrepair.

Bunnings recently officially notified the Government of its intention to vacate the town. It offered to restore its sawmill and make equipment available as a tourist attraction, subject to negotiation with the successful developer.

The town has about 34 homes—two thirds

of them unoccupied—a boarding house, a store, a primary school and a community clubhouse.

The district has such attractions as surfing, fishing, festivals, vineyards, wildlife sanctuaries and steam trains. It is also well known for its wildflowers. — Josephine Maher.

"WARREN-BLACKWOOD TIMES" WEDNESDAY 21 JANUARY 1981

WHEATLEY SET FOR TOURISM

THERE has been keen interest shown in WA Tourism Department moves to get a private developer to turn the small town of Wheatley near Manjimup into a tourist complex.

RESPONSE-2 AMX-3 ... in 1948 for the sawmilling industry, would be neglected.

Wheatley, centred on the Donnelly River mill, attracted the State government's interest in 1978 when Bunnings ended its milling operations there in July.

The town lies in picturesque countryside about 20 km from Manjimup and has been described as a potentially exciting development project and a unique attraction.

The town has about 10 permanent residents. The government was worried that the town, which was established

Bunnings recently officially notified the government of its intentions to leave the town.

It offered to restore its sawmill and make equipment available as a tourist attraction, subject to negotiations with the developer.

The town has 34 houses — two thirds of them unoccupied — a boarding house, store, primary school and a community clubhouse.

APPENDIX 14.

Mill to used for Tourism Warren & Blackwood Times 8th July 1981

Mill town to be tourist complex

DONNELLY, River Mill townsite will soon be developed as a tourist complex.

The State Government has accepted plans by Briefcase Holdings Pty Ltd which are expected to attract tourists to the entire district.

Company director, Ray Moss said that a restoration and renovation programme would start as soon as official documents were prepared by the Government.

Initial expenditure would cost the company \$270,000. Mr Moss said he hoped that the resort would be open to the public for the August school holidays.

The complex will be built in several stages. The first step will be to re-develop the mill town houses.

After the resort has been open for about a year the company expects to set up a caravan park and a "canvas town".

The canvas town would consist of permanent dwellings built from canvas.

Final stage will be the building of a log cabin style motel. Facilities will include tennis courts and a small golf course and the upgrading of natural fishing and swimming spots.

New shopping facilities and a museum will be built.

Briefcase Holdings expect patrons to come from three areas: Schools throughout the State, people from the metropolitan area who want a holiday in the country, and interstate visitors.

Premier, Sir Charles Court, said the development would give the old mill town a new lease of life.

'Donnelly River was born following an agreement between the State Housing Commission and Bunnings Pty Ltd in 1948 specifically to develop the saw milling industry and to provide work opportunities in that industry,' Sir Charles said.

"While the company ceased milling operations in June 1978, the township obviously still has a future — as a tourist and holiday centre," he said.

One dwelling on the site will be allocated to youth hostel members.

The Premier's announcement was welcomed by local Members of Parliament, Mr Sandy Lewis MLC and Mrs Winifred Piesse MLC.

Mr Lewis said: "It is great to see another forestry or mill area be-

ing used for recreation and tourist purposes. Donnelly River will fit in with Lewana, the Boyup Brook flax mill, Tone River and other initiatives the Government has taken in the South West in the past," he said.

Tourism Minister Ian Laurance said the project would further enhance the tourism potential of the South-West by providing a different sort of attraction.

"It will also stimulate the flow of visitors to the Bibbulmun track and the Nannup, Manjimup and Bridgetown area.

"I can see it having a great future as a tourist, educational and recreational facility."

Mr Laurance said he was particularly pleased at the range of different accommodation which would be available to visitors.

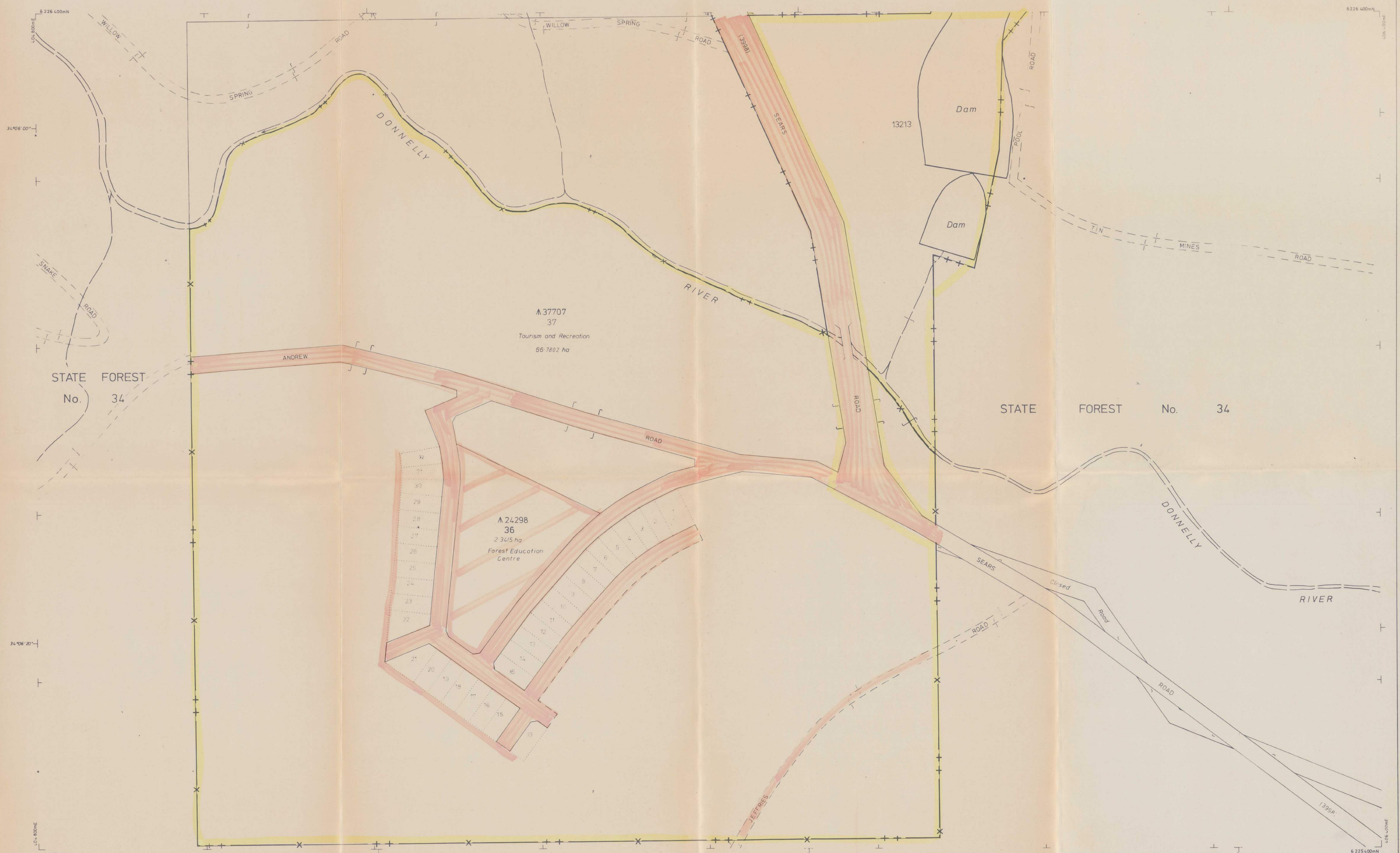
The townsite consists of about 35 houses, a school, mill, store and other facilities.

Manjimup Shire Council president Cr C. S. Crombie said the three shires involved, Manjimup, Bridgetown and Greenbushes and Nannup had all supported the concept as the Donnelly River Mill was a part of the historical scene, particularly the district's timber industry.

Cr Crombie said he was delighted to learn of the Tourism Minister's success in finalising details with Briefcase Holdings Pty Ltd and that if the project was successful it would be a boost to tourism in the Lower South-West.

APPENDIX 15.

Plan of leased reserve 37707



Information shown on this map should not be used for legal purposes, but reference made to original documents.

PRODUCED AS PART OF THE STATE LARGE SCALE SERIES OF CADASTRAL AND TOPOGRAPHICAL MAPS AT SCALES OF 1:1000, 1:500, 1:200, 1:100, 1:50 AND BASED UPON THE AUSTRALIAN MAP GRID TO A STANDARD RECTANGULAR SHEET SYSTEM OF 800 mm x 500 mm.

UNIVERSAL TRANSVERSE MERCATOR PROJECTION ZONE No. 50
HORIZONTAL DATUM AUSTRALIAN GEODETIC DATUM 1986
VERTICAL DATUM AUSTRALIAN HEIGHT DATUM

COMPILED BY THE DEPARTMENT OF LANDS & SURVEYS
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Surveyed Boundary
Unsurveyed Boundary
Grouped Lots or Locations Boundary
Townsite Boundary (Under Land Act)
Townsite Boundary (Under Local Govt. Act)
Agricultural or Suburban Area or Estate Boundary
Land District Boundary
State Forest Boundary
Subdivided Crown Lot or Location Boundary
Water Control Area Boundary
Local Authority Boundary
Locations, Town or Suburban Lots
Agricultural Area Estate & L.T.D. Lots
Trig Station or Standard Survey Mark

UNCOLOURED
PINK WASH
PINK WASH WITH GREEN BORDER
BLUE WASH
BROWN WASH
LINE (1:10,000)

Freehold Land
Land Leased Under Conditional Purchase
Land Leased Under Section 116
Vacant Crown Land
Reserves
Freehold Reserves
Temporary Reserves
Water Features
Public Roads
Private Roads

VALUER GENERAL'S OFFICE
UNIMPROVED VALUES
EFFECTIVE FROM

VALUER
VALUER GENERAL

WHEATLEY TOWNSITE
WESTERN AUSTRALIA
Scale 1 : 2000

LAND DISTRICT NELSON
LOCAL AUTHORITY SHIRE OF NANNUP
ON PLAN 439C/40 SOUTH WEST MINERAL FIELD

ADJOINING SHEETS
21.27-22.27
21.26-22.26
OVERLAY IDENTIFICATION

Sheet No: 2000 BG.28/Pt.21.26,21.27,22.26 & 22.27

APPENDIX 16.

Details of the Mr C R Bunning and Mr John Scott and also photographs of Mr C R Bunning at the closure of the mill, and also Mr John Scott during a site inspection in November 1993

MR C R BUNNING

Mr Charles Bunning joined Bunnings Ltd in 1928 after completing a degree in civil engineering at Melbourne University. Mr Bunning was engaged in a wide range of company activities including company contracting and the bush operations.

Mr Bunning was foremost in developing the Donnelly River Mill and in the general expansion of the company's timber activities in the general area.

He became joint Managing Director of the company with his brother Mr G M Bunning in 1956 and continued this role as the company expanded taking over Millers (WA) Ltd and merging with Hawker Siddely and becoming the largest logging company in Australia.



Photo Of Mr C R Bunning Speaking At The Closure Of The Donnelly River Mill On 28 June 1978.

MR JOHN SCOTT

Mr Scott commenced working with Bunnings Ltd in the 1930's as a student whilst completing an electrical and mechanical engineering degree at the University of Western Australia.

He served with the Royal Australian Electrical and Mechanical Engineering Corps during the second world war and was Adjutant Engineer with the 9th Australian Division in the Borneo campaign.

He rejoined Bunnings in 1946 and was engaged in a wide range of company activities including contracting and mill operations.

Mr Scott was directly involved with the design and construction of the Donnelly River Mill and as Chief Engineer of the Company was directly involved with the running of the mill during its 29 years of operation and overseeing much of the planning of the company's engineering development in the region during this period.

His experience with heavy road tank transporters during his military service was instrumental in the use of surplus Army Diamond T trucks in developing road transport as the method of carting logs from the bush to the mill.

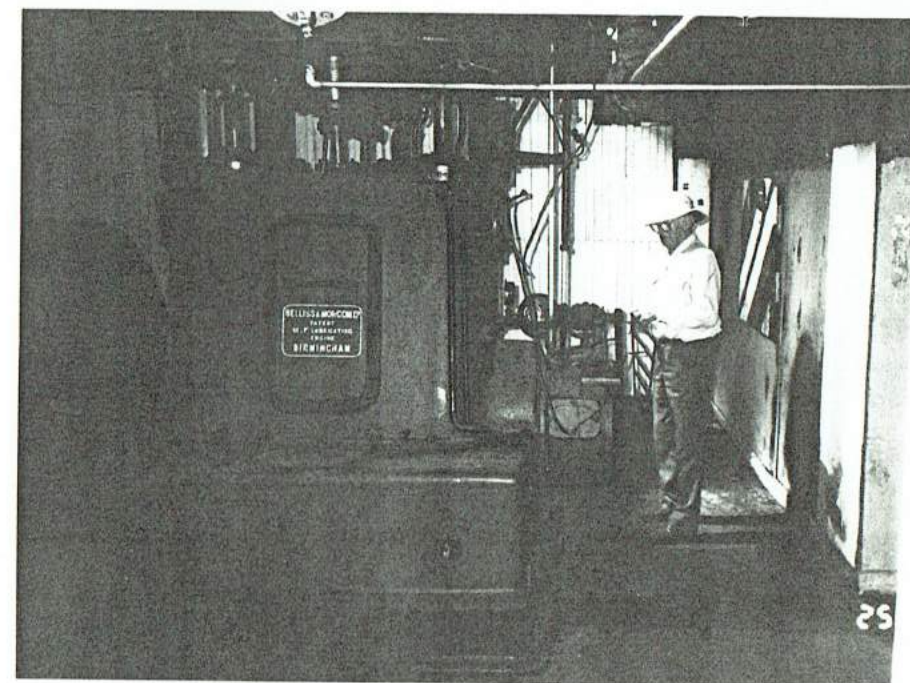


Photo Of Mr J Scott During A Visit To The Mill On 12 November 1993.

